DAV-BC150/BC250

SERVICE MANUAL

Ver 1.0 2004.06

US Model
Canadian Model
E Model
DAV-BC150/BC250
Australian Model
DAV-BC150

- DAV-BC150/BC250 are composed of following models. As service manuals are issued for each component model, please refer to them.

COMPONENT MODEL NAME

	DAV-BC150	DAV-BC250
DVD RECEIVER	HCD-BC150	HCD-BC250
FRONT SPEAKER	SS-TS10	SS-TS11
SURROUND SPEAKER	SS-TS10	SS-TS10
CENTER SPEAKER	SS-TS10	SS-CT11
SUB WOOFER	SS-WS10	SS-WS10

PARTS LIST

Part No.	Description	Remark
	ACCESSORIES ************	
1-478-643-11	COMMANDER, STANDARD (RM-SS250)	
1-754-059-12	ANTENNA, LOOP (AM)	
1-754-060-13	ANTENNA (FM)(E,EA,KR,MX,TW,AUS)	
1-754-147-41	ANTENNA (FM)(US,CND)	
1-769-108-11	CORD, CONNECTION	
1-827-244-11	CORD (WITH CONNECTOR)	
2-148-381-01	FOOT PAD (DAV-BC250)	
4-236-887-02	CUSHION (SPK)(DAV-BC150)	
4-255-321-13	MANUAL, INSTRUCTION (ENGLISH) (US,CND,E,EA,KR,TW,AUS)	
4-255-321-23	MANUAL, INSTRUCTION (FRENCH)(CND,EA)	
4-255-321-31	MANUAL, INSTRUCTION (SPANISH)(E,MX)	
4-255-321-41	MANUAL, INSTRUCTION (TRADITIONAL CHINESE)(TW)	
4-255-321-51	MANUAL, INSTRUCTION (ARABIC)(EA)	

- Abbreviation
  AUS : Australian model.
  CND : Canadian model.
  EA : Saudi Arabia model.
  KR : Korea model.
  MX : Mexican model.
  TW : Taiwan model.

DVD HOME THEATRE SYSTEM

9-877-955-01
2004F16-1
© 2004.06

Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.06	New

HCD-BC150/BC250

SERVICE MANUAL

Ver. 1.6 2007. 10

US Model
Canadian Model
E Model
HCD-BC150/BC250
Australian Model
HCD-BC150

HCD-BC150/BC250 are the amplifier, DVD/CD and tuner section in DAV-BC150/BC250.

Photo: HCD-BC150

This system incorporates with Dolby* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS** Digital Surround System.

* Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

	Former Type Models	New Type Models (US, Canadian)
Model Name Using Similar Mechanism	NEW	NEW
Mechanism Type	CDM81A-DVBU27	CDM81C-DVBU100
Optical Pick-up Name	DBU-1	KHM-310AAB/C2NP

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:	With 4 ohm loads, both channels driven, from 200 – 20,000 Hz; rated 65 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 milli watts to rated output.

Amplifier section

BC150

Stereo mode (rated)	65W + 65W (4 ohms at 1 kHz, DIN)
Surround mode (reference)	
North American models:	Front: 108 W + 108 W (with SS-TS10) Center*: 108 W (with SS-TS10) Surround*: 108 W + 108 W (with SS-TS10) Subwoofer*: 110 W (with SS-WS10)
Other models:	Front: 85 W + 85 W (with SS-TS10) Center*: 85 W (with SS-TS10) Surround*: 85 W + 85 W (with SS-TS10) Subwoofer*: 85 W (with SS-WS10)

BC250

Stereo mode (rated)	65 W + 65 W (4 ohms at 1 kHz, DIN)
Surround mode (reference)	Front: 113 W + 113 W (with SS-TS11) Center*: 113 W (with SS-CT11) Surround*: 113 W + 113 W (with SS-TS10) Subwoofer*: 115 W (with SS-WS10)

* *Depending on the sound field settings and the source, there may be no sound output.*

Inputs	VIDEO/SAT (AUDIO IN): Sensitivity: 250/400 mV Impedance: 50 kilohms
Phones	Accepts low-and high-impedance headphones.

DVD system

Laser	Semiconductor laser (DVD: λ = 650 nm) (CD: λ = 780 nm) Emission duration: continuous
Signal format system	NTSC (North American models) NTSC/PAL (Other models)
Frequency response (at 2 CH STEREO mode)	DVD (PCM): 2 Hz to 22 kHz (±1.0 dB) CD: 2 Hz to 20 kHz (±1.0 dB)

Tuner section

System	PLL quartz-locked digital synthesizer system
FM tuner section	
Tuning range	
North American models:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz

— Continued on next page —

DVD RECEIVER

9-877-956-07
2007J16-1
© 2007.10

Sony Corporation
Audio Business Group
Published by Sony Techno Create Corporation

AM tuner section	
Tuning range	
North American models:	531 – 1,710 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
Middle Easten models:	531 – 1,602 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
antenna	AM loop antenna
Intermediate frequency	450 kHz

Video section

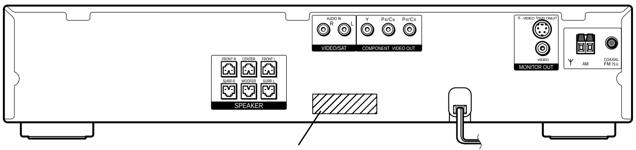
Outputs	Video: 1 Vp-p 75 ohms S video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms COMPONENT: Y: 1 Vp-p 75 ohms PB/CB, PR/CR: 0.7 Vp-p 75 ohms

General

Power requirements	
North American and Mexican models:	120 V AC, 60 Hz
Taiwan model:	120V AC, 50/60 Hz
Other models:	220 – 240 V AC, 50/60 Hz
Power consumption	100 W 0.3 W (at the Power Saving Mode)
Dimensions (approx.)	430 × 90 × 403 mm (17 × 3 5/8 × 15 7/8 inches) (w/h/d) incl. projecting parts incl. projecting parts
Mass (approx.)	5.5 kg (12 lb 3 oz)

Design and specifications are subject to change without notice.

MODEL IDENTIFICATION
– Rear Panel –



Part No.

Model	Part No.
HCD-BC150 KR	2-177-675-0▯
HCD-BC150 US	4-252-115-0▯
HCD-BC150 CND	4-252-115-1▯
HCD-BC150 EA	4-252-115-2▯
HCD-BC150 AUS	4-252-115-3▯
HCD-BC150 E41	4-252-115-4▯
HCD-BC150 MX	4-252-115-5▯
HCD-BC250 US	4-252-115-6▯
HCD-BC250 CND	4-252-115-7▯
HCD-BC250 MX	4-252-115-8▯
HCD-BC150 TW	4-252-115-9▯

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- Abbreviation

AUS	: Australian model.
CND	: Canadian model.
E41	: 230 V AC Area in E model.
EA	: Saudi Arabia model.
KR	: Korea model.
MX	: Mexican model.
TW	: Taiwan model.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

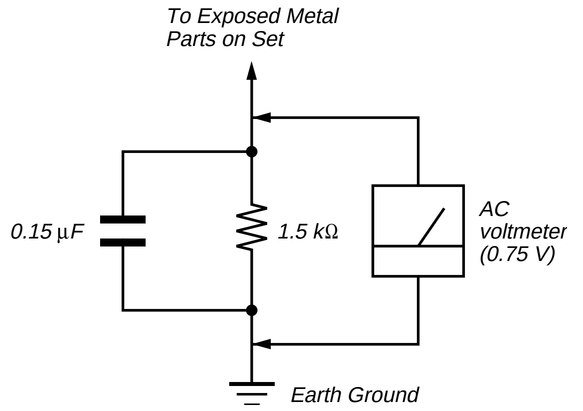


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

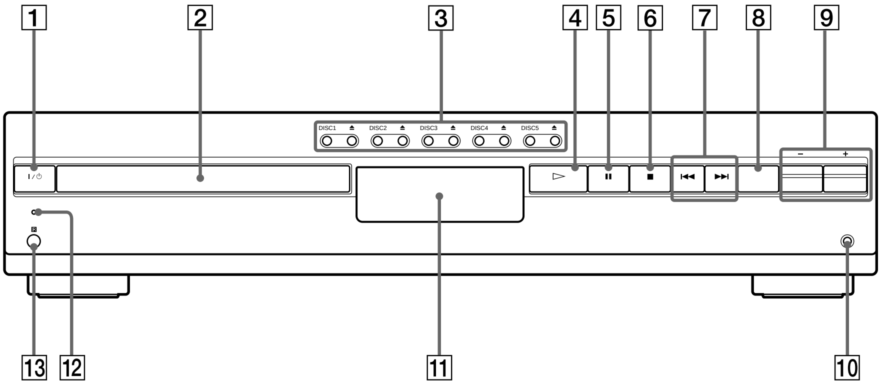
SECTION 1
GENERAL

This section is extracted from instruction manual.

Index to Parts and Controls

For more information, refer to the pages indicated in parentheses.

Front Panel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DISC1
DISC2
DISC3
DISC4
DISC5
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+
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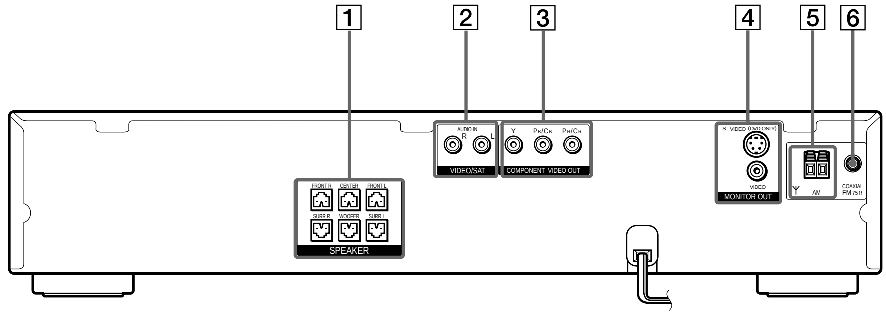
12
11
10

1 **I/⏻ (power) (28)**
2 **Disc tray (28)**
3 **DISC 1-5 ⏏ (eject) indicators (28, 62)**
4 **▷ (play) (28, 62)**
5 **❚❚ (pause) (30)**
6 **■ (stop) (30)**
7 **⏮/⏭, PRESET -/+ (30, 60, 62)**
8 **FUNCTION (28, 57, 60)**
9 **VOLUME +/- (28)**
10 **PHONES jack (28)**
11 **Front panel display (75)**
12 **STANDBY indicator (28)**
13 **(remote sensor) (13)**

Rear Panel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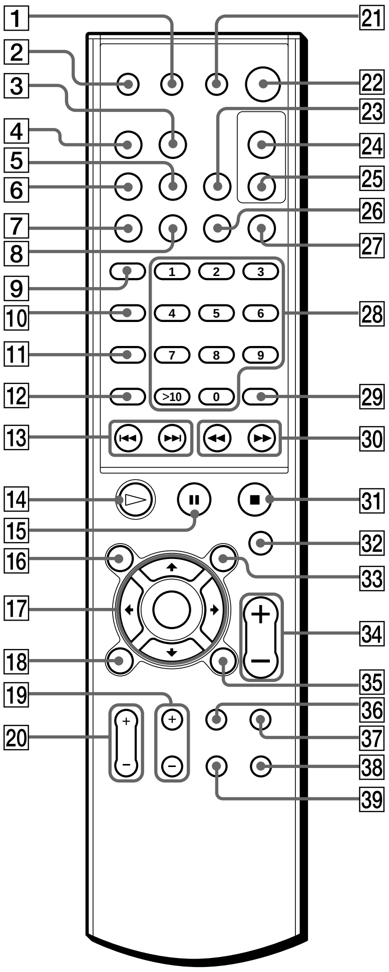
AUDIO IN
R
L
VIDEO/SAT
Y
PB/CB
PR/CR
COMPONENT VIDEO OUT
S VIDEO (DVD ONLY)
VIDEO
MONITOR OUT
AM
COAXIAL
FM 75Ω
FRONT R
CENTER
FRONT L
SURR R
WOOFER
SURR L
SPEAKER

1 **SPEAKER jacks (14)**
2 **VIDEO/SAT AUDIO IN jacks (20, 58)**
3 **COMPONENT VIDEO OUT jacks (20)**
4 **MONITOR OUT (VIDEO / S VIDEO) jacks (20)**
5 **AM terminal (19)**
6 **FM 75Ω COAXIAL jack (19)**

Remote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1 **SONY TV DIRECT (56)**

2 **PROGRESSIVE (22, 55)**

3 **DISC SKIP (28, 30)**

4 **MUTING (30)**

5 **REPEAT/FM MODE (37, 60)**

6 **SLEEP (61)**

7 **TUNER/BAND (59, 60)**

8 **TUNER MENU (59, 60)**

9 **TV (55)**

10 **AUDIO (46)**

11 **ANGLE (51)**

12 **SUBTITLE (51)**

13 **I◀◀/▶▶I, PRESET -/+ (30, 32, 60)**

14 **▷ PLAY (28, 30, 31, 32, 36, 37, 38)**

15 **II PAUSE (30)**

16 **TOP MENU (32)**

17 **←/↑/↓/→/ENTER (25, 32, 34, 35, 36, 37, 39, 46, 52, 58, 59, 60, 62, 63)**

18 **▭ DISPLAY (34, 35, 37, 39, 44, 45, 46, 52, 63)**

19 **TV CH +/- (55, 56)**

20 **TV VOL +/- (55)**

21 **TV I/⏻ (on/standby) (55)**

22 **I/⏻ (standby) (28, 59, 60)**

23 **DSGX (50)**

24 **AUTO FORMAT DIRECT (48, 49)**

25 **MODE (48, 49)**

26 **NIGHT MODE (50)**

27 **FUNCTION (22, 28, 55, 57, 58, 59, 60)**

28 **Number buttons (32, 39, 52, 55, 56)**

29 **ENTER (55)**

30 **◀◀/▶▶/◀II/II▶ SLOW, TUNING -/+ (38, 59, 60)**

31 **■ STOP (30, 31, 32)**

32 **AMP MENU (25, 58, 62)**

33 **MENU (32)**

34 **VOLUME +/- (30, 60)**

35 **↩ RETURN (32, 34, 35, 39, 52, 63)**

36 **TV/VIDEO (55, 56)**

37 **DISPLAY (43, 60)**

38 **TIME/TEXT (41, 44)**

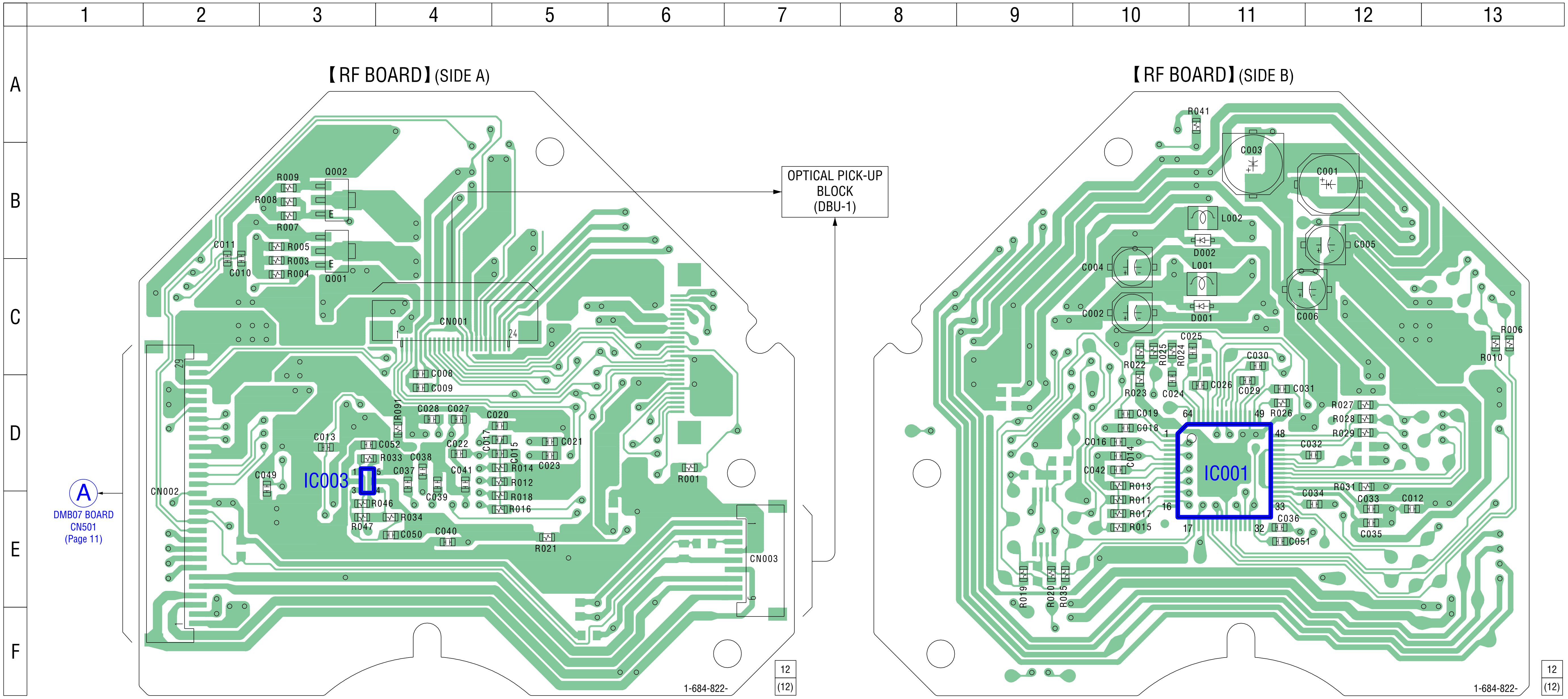
39 **CLEAR (39)**

MEMO

SECTION 2
DIAGRAMS

2-1. PRINTED WIRING BOARD — RF SECTION —

• See page 36 for Circuit Boards Location.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D
E
F
【RF BOARD】(SIDE A)
【RF BOARD】(SIDE B)
OPTICAL PICK-UP BLOCK (DBU-1)
A
DMB07 BOARD CN501 (Page 11)
CN001
CN002
CN003
IC003
IC001
Q001
Q002
D001
D002
L001
L002
R003
R004
R005
R007
R008
R009
R012
R014
R016
R018
R021
R033
R034
R046
R047
R091
R001
R006
R010
R011
R013
R015
R017
R019
R020
R022
R023
R024
R025
R026
R027
R028
R029
R031
R035
R041
C001
C002
C003
C004
C005
C006
C008
C009
C010
C011
C012
C013
C014
C015
C016
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C039
C040
C041
C042
C049
C050
C051
C052
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16
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32
33
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49
64
24
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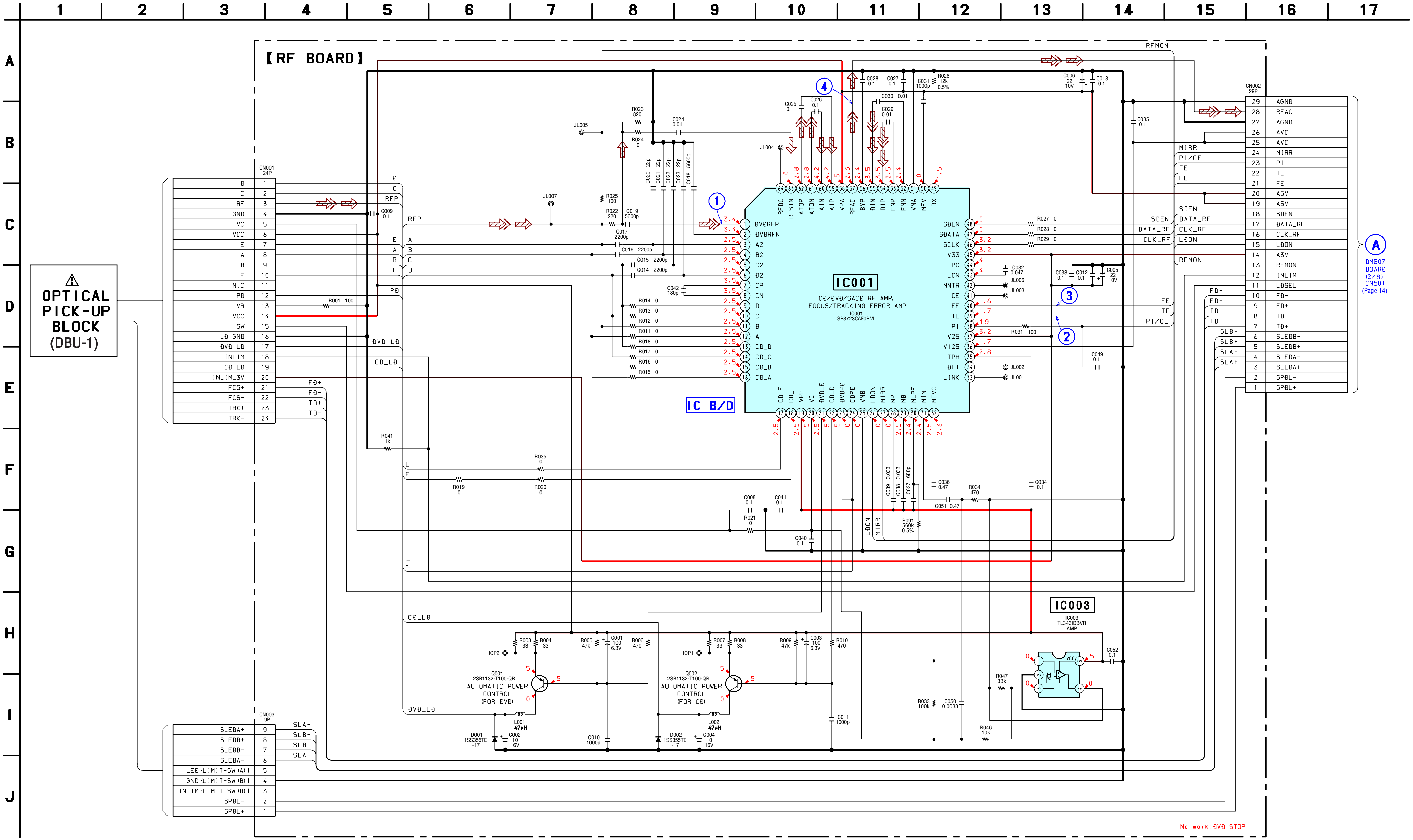
1-684-822-
12
(12)

• **Semiconductor Location**

Ref. No.	Location
D001	C-11
D002	B-11
IC001	D-11
IC003	D-4
Q001	C-3
Q002	B-3

2-2. SCHEMATIC DIAGRAM — RF SECTION —

- See page 37 for Waveforms.
- See page 39 for IC Block diagrams.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A
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C
D
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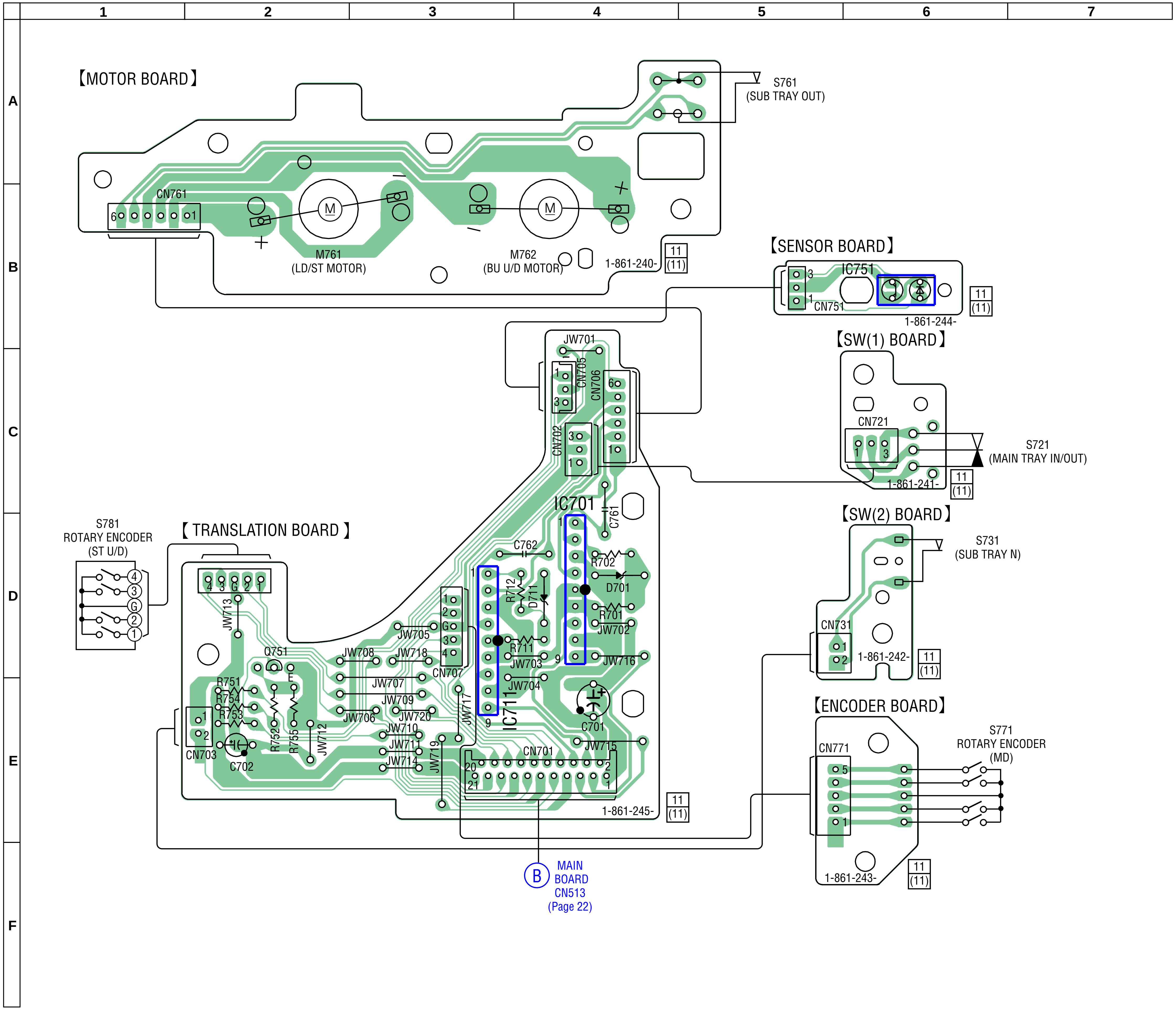
H
I
J
【RF BOARD】
OPTICAL PICK-UP BLOCK (DBU-1)
CN001 24P
D
C
RF
GND
VC
VCC
E
A
B
F
N.C
PD
VR
VCC
SW
LD GND
DVD LD
INLIM
CD LD
INLIM_3V
FCS+
FCS-
TRK+
TRK-
C009 0.1
R001 100
R041 1k
IC001
CD/DVD/SACD RF AMP, FOCUS/TRACKING ERROR AMP
IC001 SP3723CAF0PM
IC B/D
DVDRFP
DVDRFN
A2
B2
C2
D2
CP
CN
D
C
B
A
CD_D
CD_C
CD_B
CD_A
SDEN
SDATA
SCLK
V33
LPC
LCN
MNTR
CE
FE
TE
PI
V25
V125
TPH
DFT
LINK
RFDC
RFSIN
ATOP
ATON
AIN
AIP
VPA
RFAC
BYP
DIN
DIP
FNP
FNN
VNA
MEV
RX
CD_F
CD_E
VPB
VC
DVDLD
CDLD
DVDPD
CDPD
VNB
LDON
MIRR
MP
MB
MLPF
MIN
MEVO
CN002 29P
AGND
RFAC
AGND
AVC
AVC
MIRR
PI
TE
FE
A5V
A5V
SDEN
DATA_RF
CLK_RF
LDON
A3V
RFMON
INLIM
LDSEL
FD-
FD+
TD-
TD+
SLEDB-
SLEDB+
SLEDA-
SLEDA+
SPDL-
SPDL+
A
DMB07 BOARD (2/8) CN501 (Page 14)
IC003
IC003 TL3431DBVR AMP
Q001 2SB1132-T100-QR AUTOMATIC POWER CONTROL (FOR DVD)
Q002 2SB1132-T100-QR AUTOMATIC POWER CONTROL (FOR CD)
D001 1SS355TE -17
D002 1SS355TE -17
L001 47μH
L002 47μH
IOP1
IOP2
CN003 9P
SLEDA+
SLEDB+
SLEDB-
SLEDA-
LED (LIMIT-SW (A))
GND (LIMIT-SW (B))
INLIM (LIMIT-SW (B))
SPDL-
SPDL+
SLA+
SLB+
SLB-
SLA-
JL001
JL002
JL003
JL004
JL005
JL006
JL007
No mark:DVD STOP

2-3. PRINTED WIRING BOARD — CD MECHANISM SECTION —

• See page 36 for Circuit Boards Location.

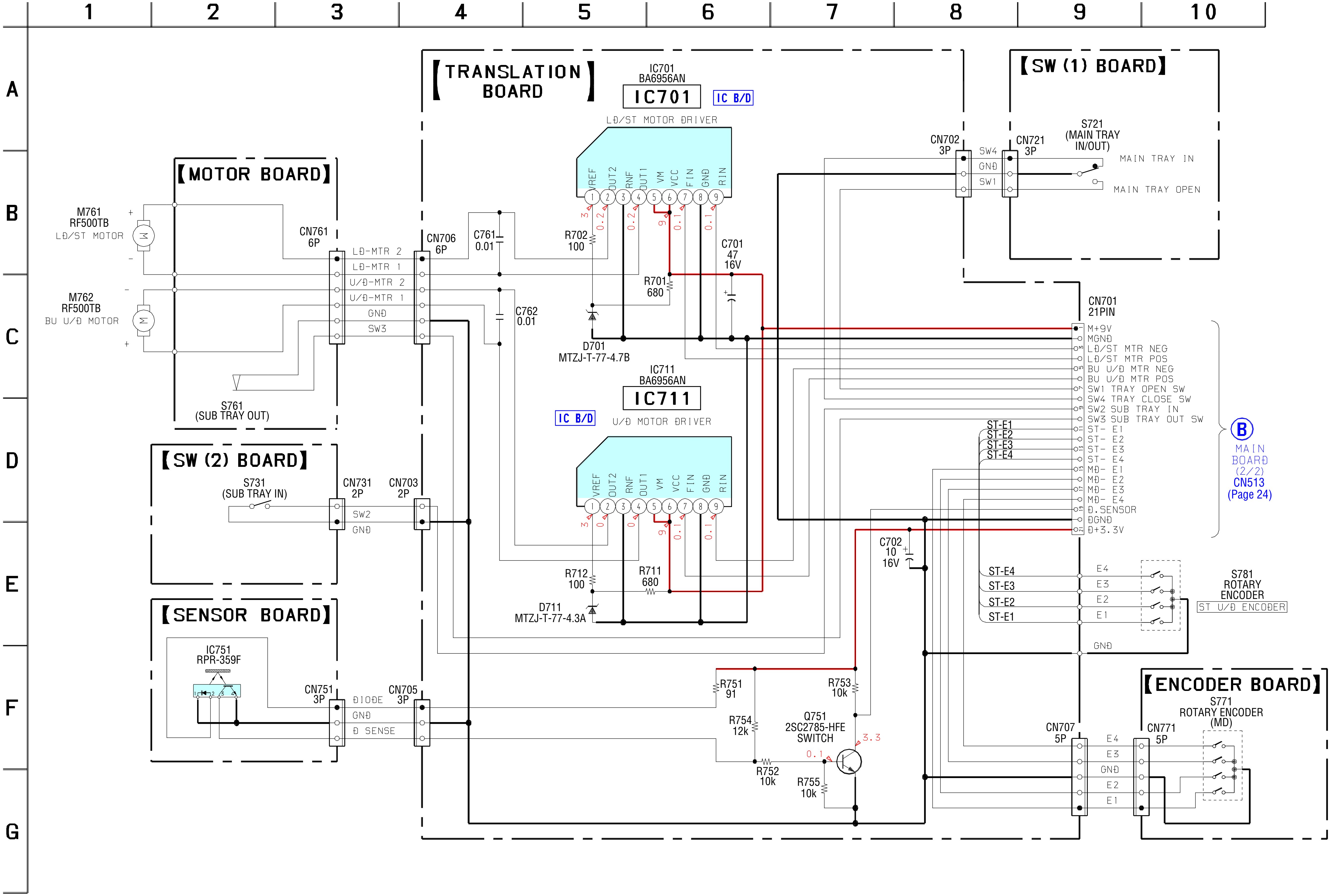

1
2
3
4
5
6
7
A
B
C
D
E
F
【MOTOR BOARD】
CN761
6
1
M
M761
(LD/ST MOTOR)
M762
(BU U/D MOTOR)
1-861-240-
11
(11)
S761
(SUB TRAY OUT)
【SENSOR BOARD】
IC751
CN751
3
1
1-861-244-
11
(11)
【SW(1) BOARD】
CN721
S721
(MAIN TRAY IN/OUT)
1-861-241-
11
(11)
【SW(2) BOARD】
S731
(SUB TRAY N)
CN731
1-861-242-
11
(11)
【ENCODER BOARD】
CN771
S771
ROTARY ENCODER
(MD)
1-861-243-
11
(11)
S781
ROTARY ENCODER
(ST U/D)
【 TRANSLATION BOARD 】
JW701
CN705
CN706
CN702
IC701
C761
C762
R702
D701
R712
D711
R701
JW702
R711
JW703
JW704
JW716
C701
JW715
IC711
CN701
20
21
2
1
9
JW705
JW718
CN707
JW708
JW707
JW709
JW706
JW720
JW710
JW711
JW714
JW719
JW717
JW712
JW713
Q751
R751
R754
R753
R752
R755
CN703
C702
1-861-245-
11
(11)
B
MAIN
BOARD
CN513
(Page 22)

- **Semiconductor Location**

Ref. No.	Location
D701	D-4
D711	D-4
IC701	D-4
IC711	E-3
IC751	B-5
Q751	D-2

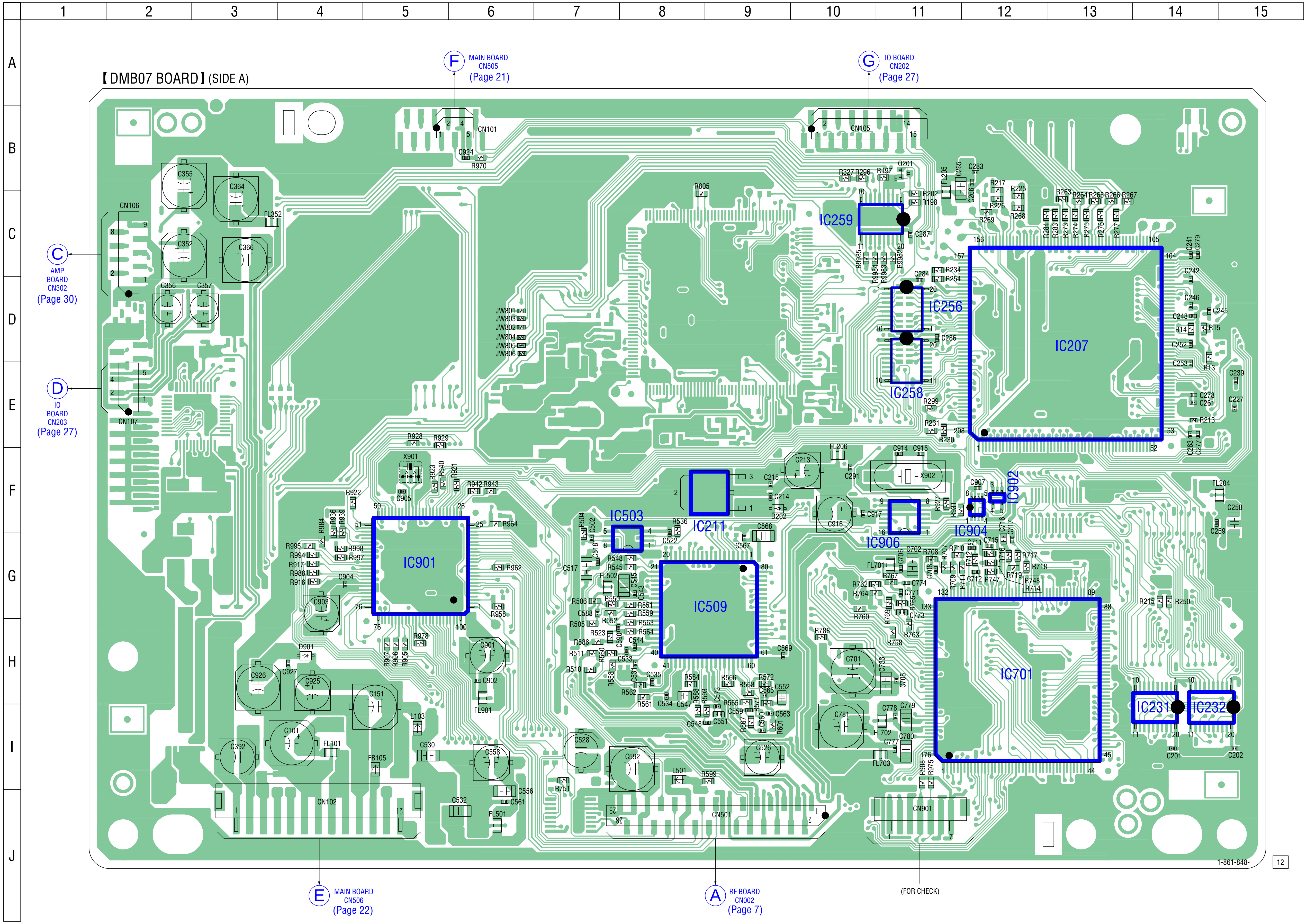
2-4. SCHEMATIC DIAGRAM — CD MECHANISM SECTION —

• See page 40 for IC Block diagrams.


1 2 3 4 5 6 7 8 9 10
A B C D E F G
TRANSLATION BOARD
IC701
BA6956AN
IC701
IC B/D
LD/ST MOTOR DRIVER
VREF OUT2 RNF OUT1 VM VCC FIN GND RIN
1 2 3 4 5 6 7 8 9
3 0.2 0.2 9 0.1 0.1
R702
100
C761
0.01
C701
47
16V
R701
680
C762
0.01
D701
MTZJ-T-77-4.7B
CN706
6P
IC711
BA6956AN
IC711
IC B/D
U/D MOTOR DRIVER
3 0 0 9 0.1 0.1
R712
100
R711
680
D711
MTZJ-T-77-4.3A
MOTOR BOARD
M761
RF500TB
LD/ST MOTOR
M762
RF500TB
BU U/D MOTOR
CN761
6P
LD-MTR 2
LD-MTR 1
U/D-MTR 2
U/D-MTR 1
GND
SW3
S761
(SUB TRAY OUT)
SW (1) BOARD
CN702
3P
SW4
GND
SW1
CN721
3P
S721
(MAIN TRAY
IN/OUT)
MAIN TRAY IN
MAIN TRAY OPEN
CN701
21PIN
M+9V
MGND
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 TRAY OPEN SW
SW4 TRAY CLOSE SW
SW2 SUB TRAY IN
SW3 SUB TRAY OUT SW
ST- E1
ST- E2
ST- E3
ST- E4
MD- E1
MD- E2
MD- E3
MD- E4
D.SENSOR
DGND
D+3.3V
ST-E1
ST-E2
ST-E3
ST-E4
B
MAIN
BOARD
(2/2)
CN513
(Page 24)
SW (2) BOARD
S731
(SUB TRAY IN)
CN731
2P
CN703
2P
SW2
GND
C702
10
16V
ST-E4
ST-E3
ST-E2
ST-E1
E4
E3
E2
E1
GND
S781
ROTARY
ENCODER
ST U/D ENCODER
SENSOR BOARD
IC751
RPR-359F
CN751
3P
CN705
3P
DIODE
GND
D SENSE
R751
91
R753
10k
R754
12k
Q751
2SC2785-HFE
SWITCH
3.3
0.1
R752
10k
R755
10k
ENCODER BOARD
S771
ROTARY ENCODER
(MD)
CN707
5P
CN771
5P
E4
E3
GND
E2
E1

2-5. PRINTED WIRING BOARD — DMB07 SECTION (SIDE A) —

• See page 36 for Circuit Boards Location.

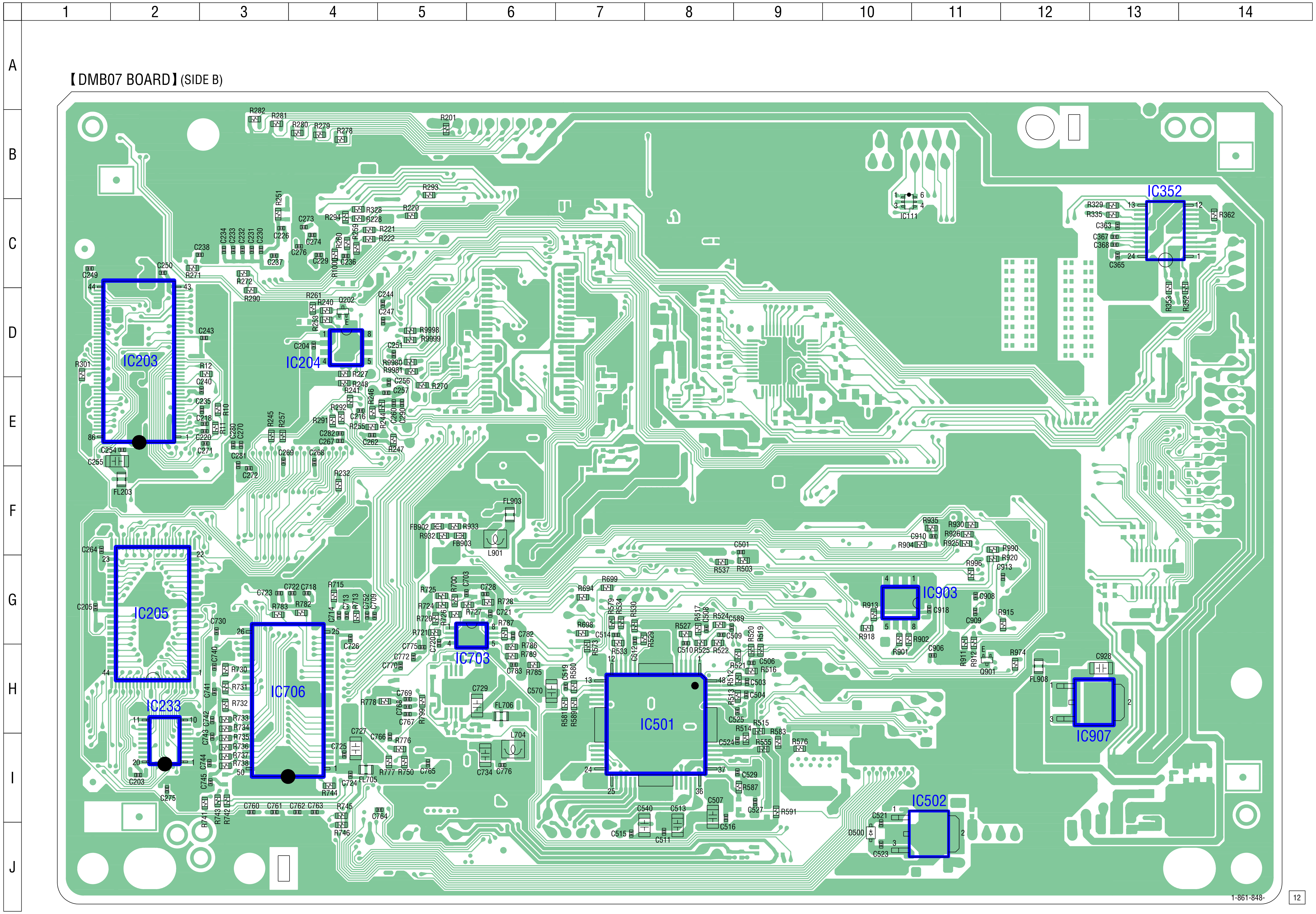

【DMB07 BOARD】(SIDE A)
F MAIN BOARD CN505 (Page 21)
G IO BOARD CN202 (Page 27)
C AMP BOARD CN302 (Page 30)
D IO BOARD CN203 (Page 27)
E MAIN BOARD CN506 (Page 22)
A RF BOARD CN002 (Page 7)
(FOR CHECK)
CN101
CN105
CN106
CN107
CN102
CN501
CN901
IC259
IC256
IC258
IC207
IC902
IC503
IC211
IC906
IC904
IC901
IC509
IC701
IC231
IC232
X901
X902
D901
D202
Q201
1-861-848-
12
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J

- **Semiconductor Location**

Ref. No.	Location
D202	F-9
D901	H-4
IC207	D-13
IC211	F-9
IC231	H-14
IC232	H-14
IC256	D-11
IC258	E-11
IC259	C-10
IC503	F-8
IC509	G-9
IC701	H-12
IC901	G-5
IC902	F-12
IC904	F-11
IC906	G-11
Q201	B-11

2-6. PRINTED WIRING BOARD — DMB07 SECTION (SIDE B) —

• See page 36 for Circuit Boards Location.

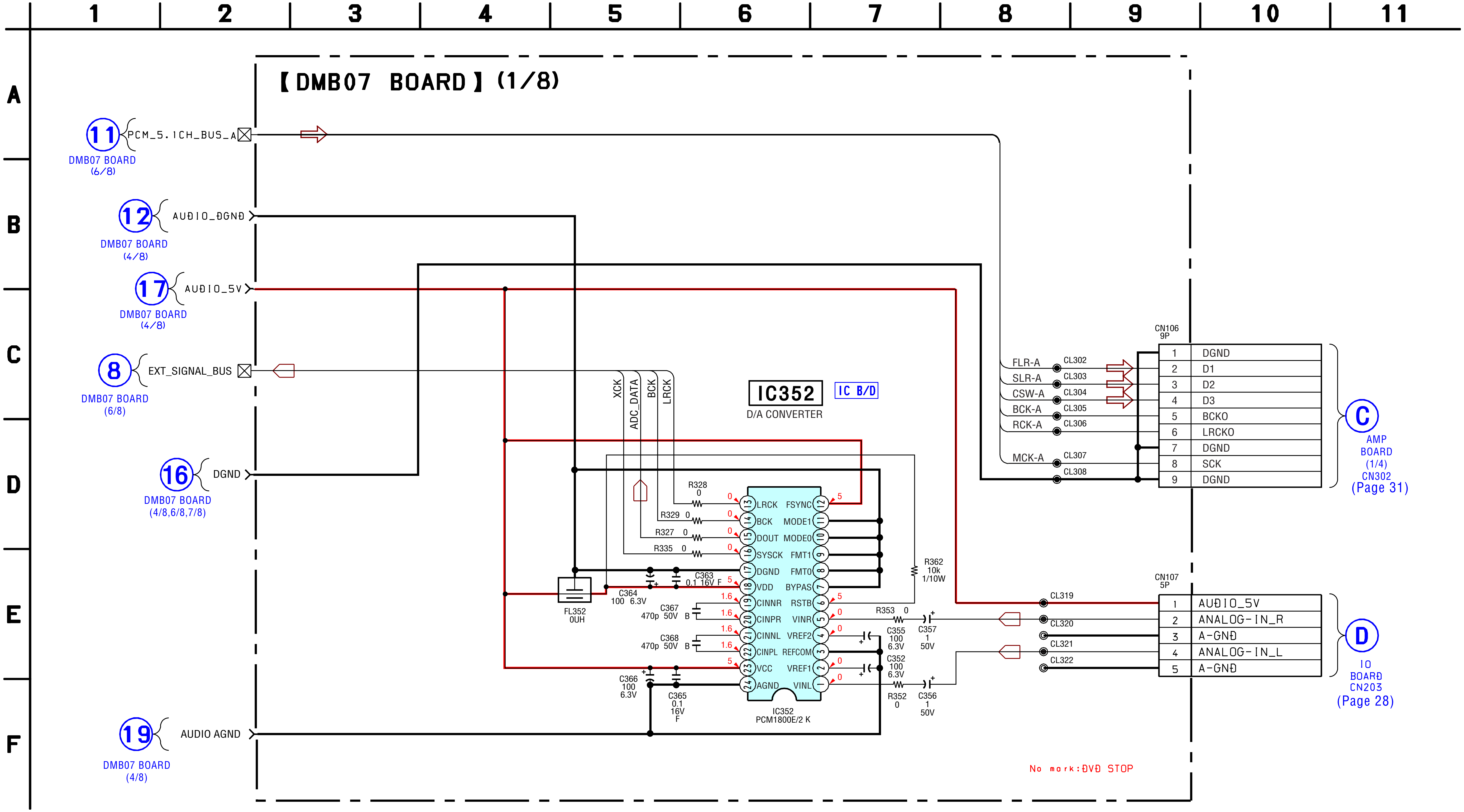

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
【DMB07 BOARD】(SIDE B)
IC203
IC204
IC205
IC233
IC706
IC703
IC501
IC903
IC352
IC111
IC907
IC502
Q202
Q901
D500
1-861-848-
12

• **Semiconductor Location**

Ref. No.	Location
D500	I-10
IC111	C-11
IC203	D-2
IC204	D-4
IC205	G-2
IC233	H-2
IC352	B-13
IC501	H-8
IC502	I-10
IC703	G-6
IC706	H-3
IC903	G-11
IC907	H-13
Q202	D-4
Q901	H-11

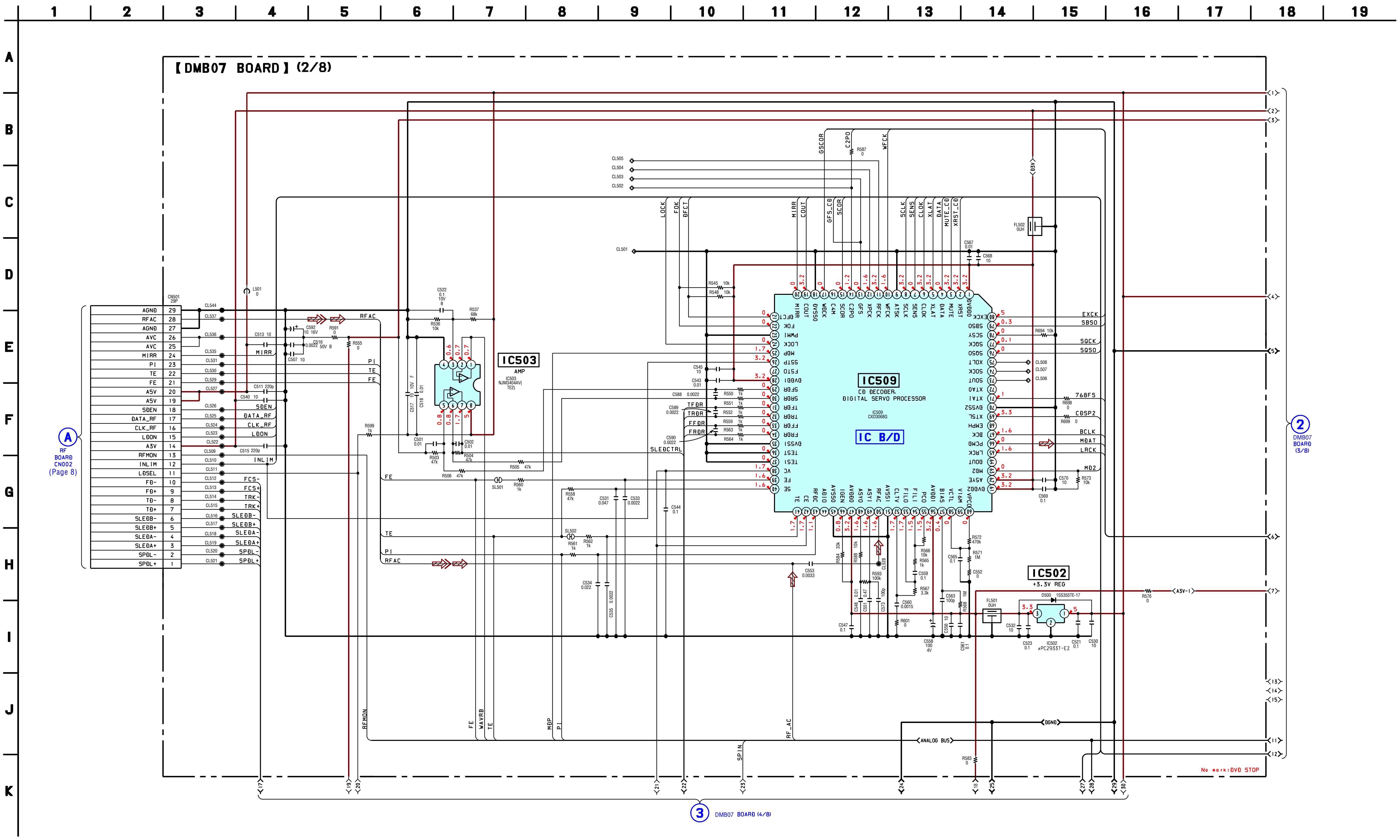
2-7. SCHEMATIC DIAGRAM — DMB07 SECTION (1/8) —

• See page 41 for IC Block diagrams.


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
【DMB07 BOARD】(1/8)
11 PCM_5.1CH_BUS_A
DMB07 BOARD (6/8)
12 AUDIO_DGND
DMB07 BOARD (4/8)
17 AUDIO_5V
DMB07 BOARD (4/8)
8 EXT_SIGNAL_BUS
DMB07 BOARD (6/8)
16 DGND
DMB07 BOARD (4/8,6/8,7/8)
19 AUDIO AGND
DMB07 BOARD (4/8)
XCK
ADC_DATA
BCK
LRCK
IC352
IC B/D
D/A CONVERTER
R328 0
R329 0
R327 0
R335 0
LRCK
BCK
DOUT
SYSCK
DGND
VDD
CINNR
CINPR
CINNL
CINPL
VCC
AGND
FSYNC
MODE1
MODE0
FMT1
FMT0
BYPAS
RSTB
VINR
VREF2
REFCOM
VREF1
VINL
IC352 PCM1800E/2 K
FL352 0UH
C363 0.1 16V F
C364 100 6.3V
C367 470p 50V B
C368 470p 50V B
C366 100 6.3V
C365 0.1 16V F
R362 10k 1/10W
R353 0
C355 100 6.3V
C357 1 50V
C352 100 6.3V
R352 0
C356 1 50V
FLR-A
SLR-A
CSW-A
BCK-A
RCK-A
MCK-A
CL302
CL303
CL304
CL305
CL306
CL307
CL308
CN106 9P
1 DGND
2 D1
3 D2
4 D3
5 BCKO
6 LRCKO
7 DGND
8 SCK
9 DGND
C AMP BOARD (1/4) CN302 (Page 31)
CL319
CL320
CL321
CL322
CN107 5P
1 AUDIO_5V
2 ANALOG-IN_R
3 A-GND
4 ANALOG-IN_L
5 A-GND
D IO BOARD CN203 (Page 28)
No mark:DVD STOP

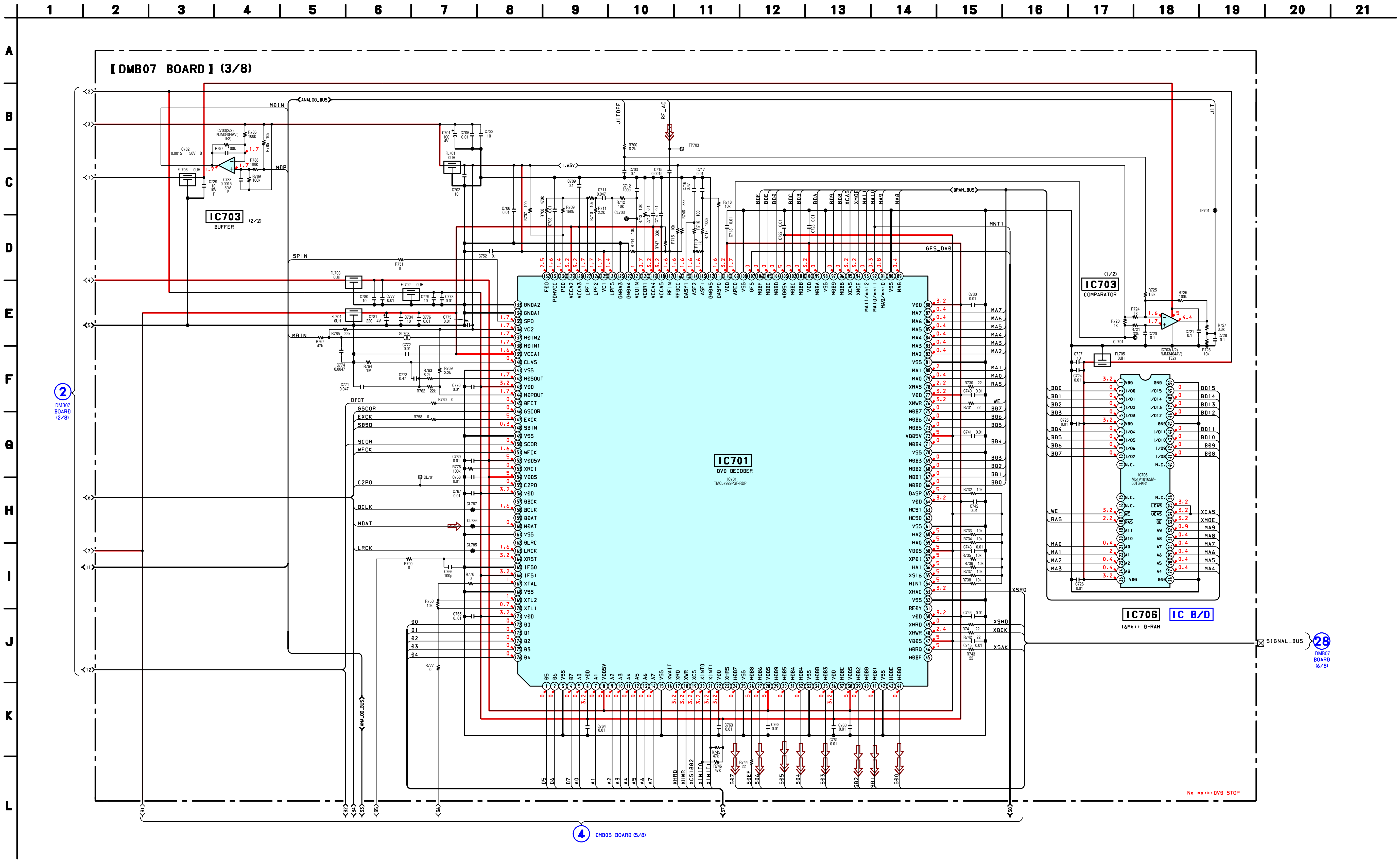
2-8. SCHEMATIC DIAGRAM — DMB07 SECTION (2/8) —

• See page 42 for IC Block diagrams.


[DMB07 BOARD] (2/8)
IC503
AMP
IC503
NJM3404AV(TE2)
IC509
CD DECODER,
DIGITAL SERVO PROCESSOR
IC509
CXD3068Q
IC B/D
IC502
+3.3V REG
IC502
μPC29S33T-E2
CN501
29P
AGND
RFAC
AGND
AVC
AVC
MIRR
PI
TE
FE
A5V
A5V
SDEN
DATA_RF
CLK_RF
LDON
A3V
RFMON
INLIM
LDSEL
FD-
FD+
TD-
TD+
SLEDB-
SLEDB+
SLEDA-
SLEDA+
SPDL-
SPDL+
A
RF BOARD
CN002
(Page 8)
2
DMB07 BOARD
(3/8)
3
DMB07 BOARD (4/8)
ANALOG BUS
DGND
A3V-1
D5V
EXCK
SBSO
SQCK
SQSO
768FS
CDSP2
BCLK
MDAT
LRCK
MD2
SLEDCTRL
TFDR
TRDR
FFDR
FRDR
RFMON
WAVRB
MDP
SPIN
RF_AC
No mark:DVD STOP

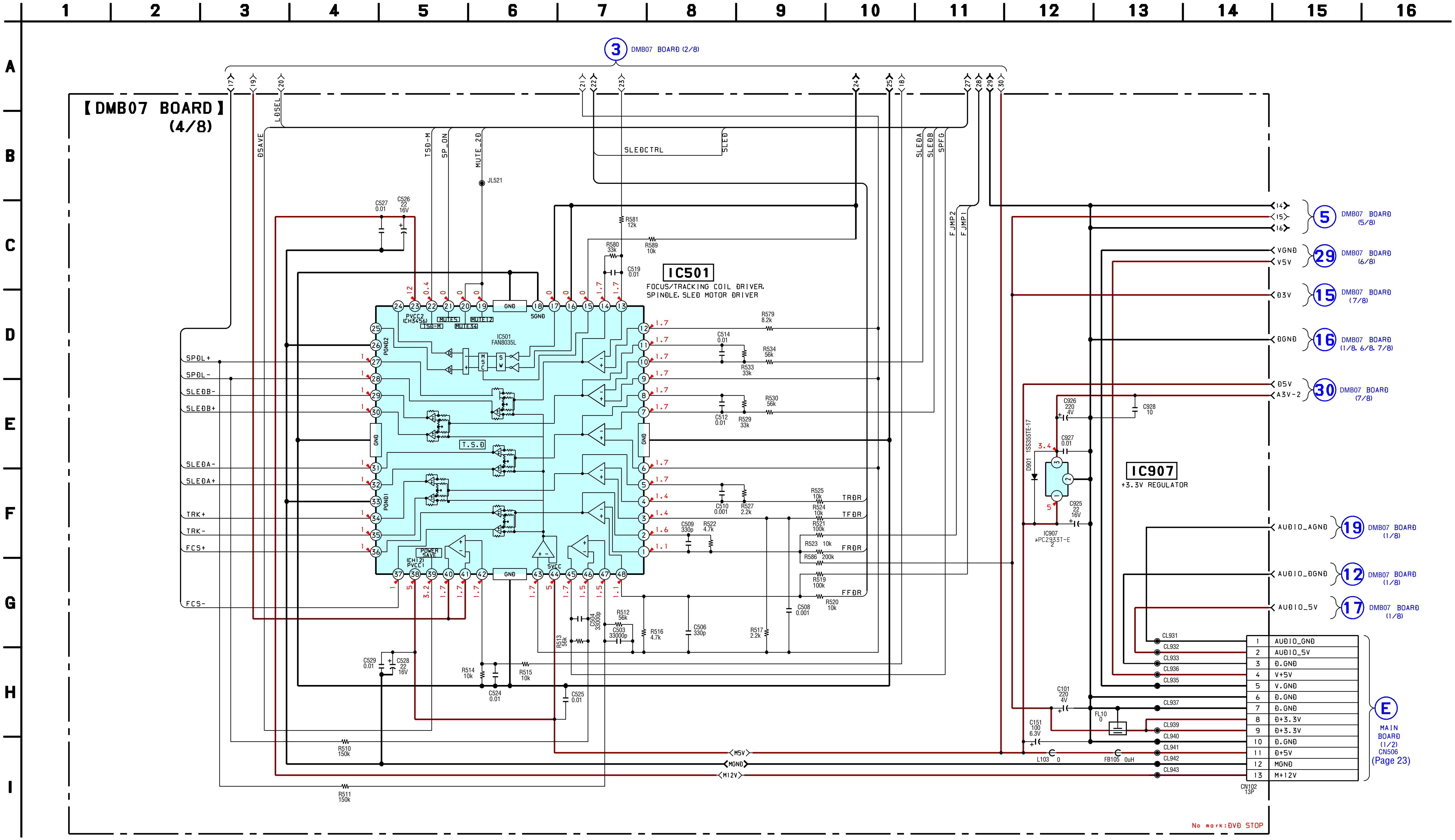
2-9. SCHEMATIC DIAGRAM — DMB07 SECTION (3/8) —

• See page 42 for IC Block diagrams. • See page 50 for IC Pin Function Description.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
A
B
C
D
E
F
G
H
I
J
K
L
【DMB07 BOARD】(3/8)
IC703 (2/2)
BUFFER
IC703(2/2) NJM3404AV(TE2)
MDIN
ANALOG_BUS
MDP
SPIN
JITOFF
RF_AC
TP703
1.65V
DRAM_BUS
MNTI
GFS_DVD
JITT
TP701
IC701
DVD DECODER
IC701 TMC57929PGF-RDP
IC703 (1/2)
COMPARATOR
IC703(1/2) NJM3404AV(TE2)
IC706
16Mbit D-RAM
IC706 M51V18165M-60TS-KR1
IC B/D
XSRQ
XSHD
XDCK
XSAK
SIGNAL_BUS
2
DMB07 BOARD (2/8)
28
DMB07 BOARD (6/8)
4
DMB03 BOARD (5/8)
DFCT
GSCOR
EXCK
SBSO
SCOR
WFCK
C2PO
BCLK
MDAT
LRCK
D0
D1
D2
D3
D4
WE
RAS
MA0
MA1
MA2
MA3
No mark:DVD STOP

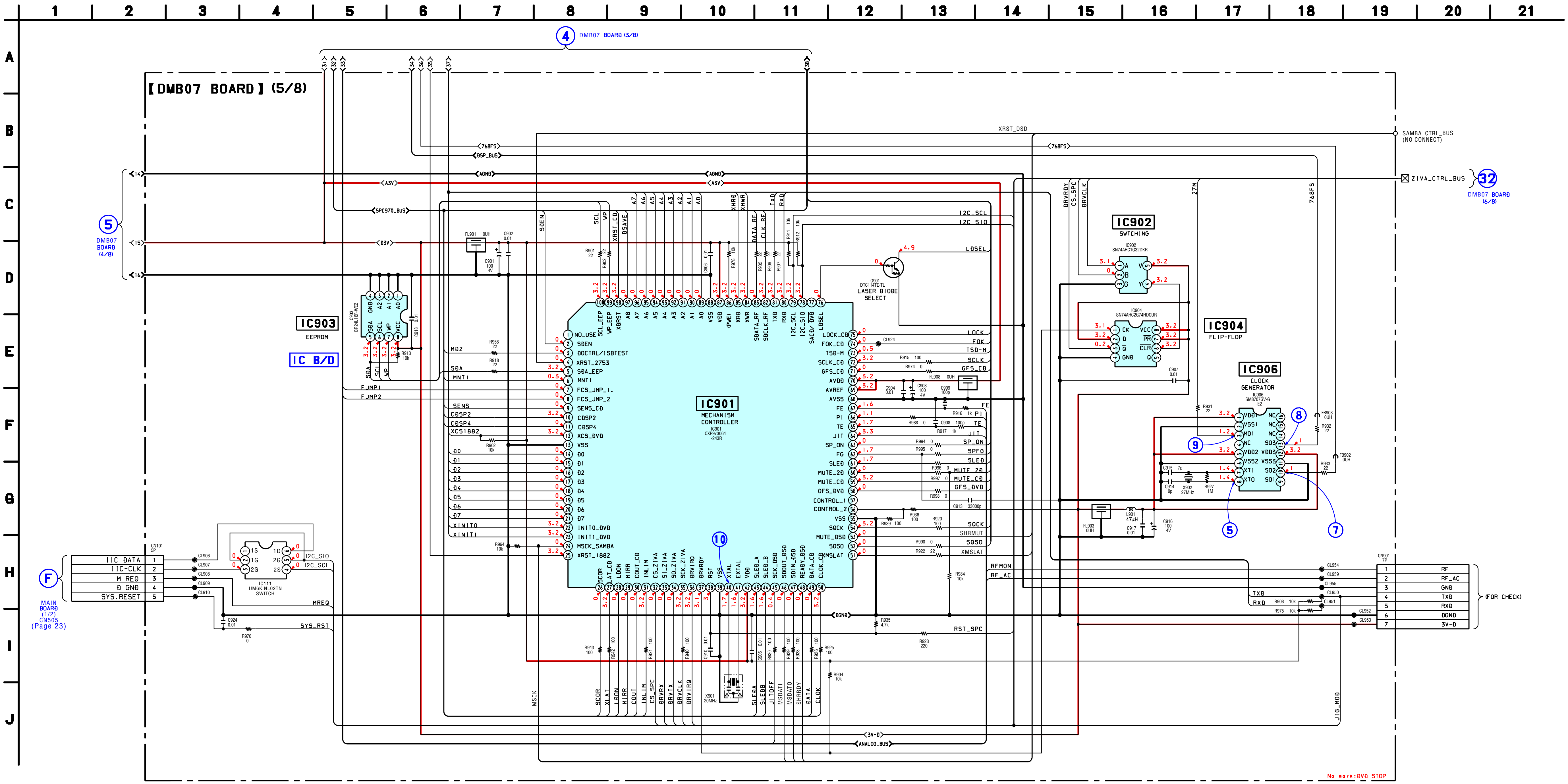
Ver 1.3

2-10. SCHEMATIC DIAGRAM — DMB07 SECTION (4/8) —

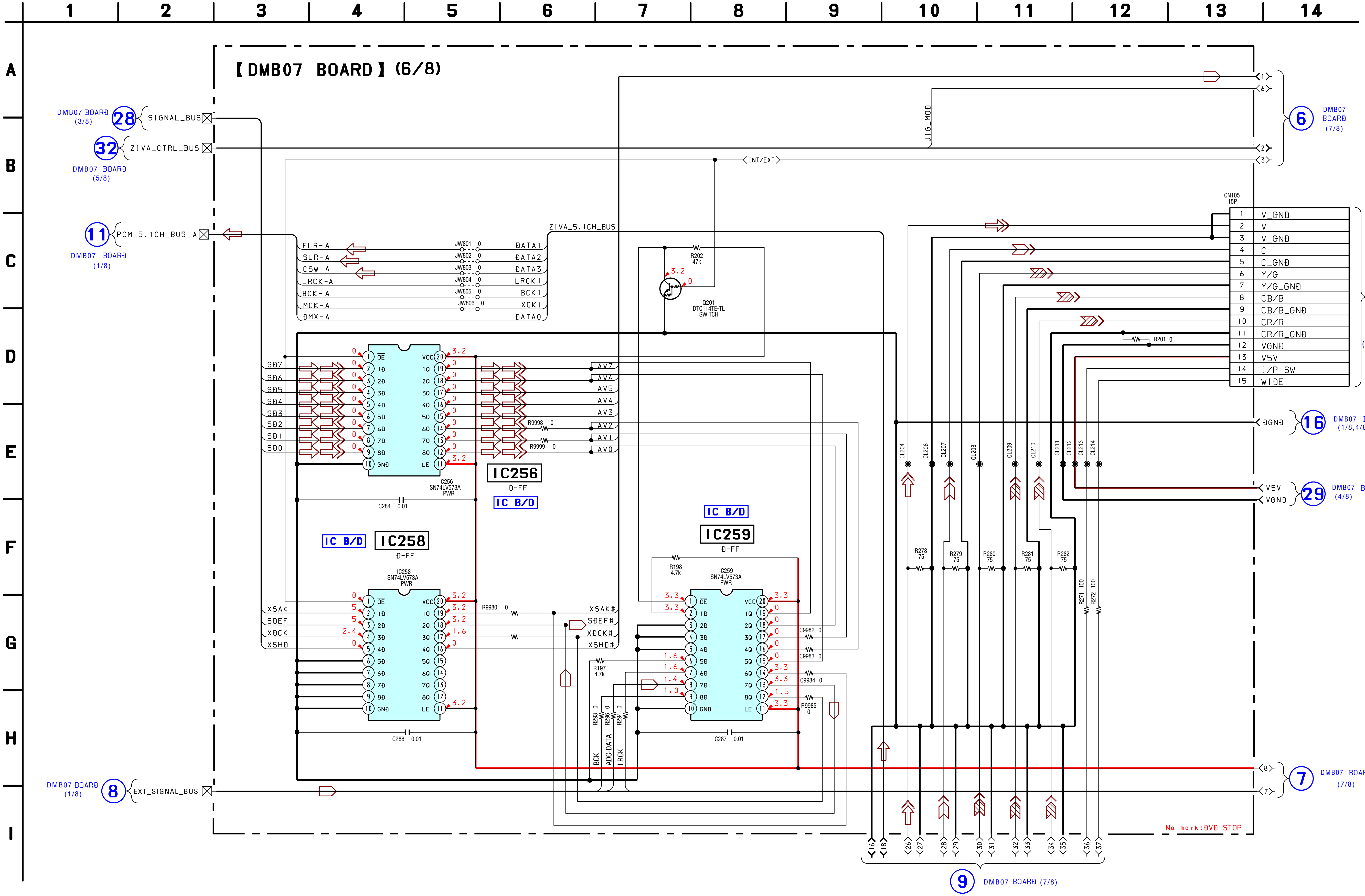

【DMB07 BOARD】
(4/8)
3 DMB07 BOARD (2/8)
IC501
FOCUS/TRACKING COIL DRIVER, SPINDLE, SLED MOTOR DRIVER
IC501 FAN8035L
IC907
+3.3V REGULATOR
IC907 μPC2933T-E2
D901 1SS355TE-17
5 DMB07 BOARD (5/8)
29 DMB07 BOARD (6/8)
15 DMB07 BOARD (7/8)
16 DMB07 BOARD (1/8, 6/8, 7/8)
30 DMB07 BOARD (7/8)
19 DMB07 BOARD (1/8)
12 DMB07 BOARD (1/8)
17 DMB07 BOARD (1/8)
E MAIN BOARD (1/2) CN506 (Page 23)
CN102 13P
1 AUDIO_GND
2 AUDIO_5V
3 D.GND
4 V+5V
5 V.GND
6 D.GND
7 D.GND
8 D+3.3V
9 D+3.3V
10 D.GND
11 D+5V
12 MGND
13 M+12V
VGND
V5V
D3V
DGND
D5V
A3V-2
AUDIO_AGND
AUDIO_DGND
AUDIO_5V
M5V
MGND
M12V
SPDL+
SPDL-
SLEDB-
SLEDB+
SLEDA-
SLEDA+
TRK+
TRK-
FCS+
FCS-
DSAVE
LDSEL
TSD-M
SP_ON
MUTE_20
SLEDCTRL
SLED
SLEDA
SLEDB
SPFG
FJMP2
FJMP1
TRDR
TFDR
FRDR
FFDR
T.S.D
POWER SAVE
PVCC2
PVCC1
SVCC
SGND
GND
PGND1
PGND2
No mark:DVD STOP

2-11. SCHEMATIC DIAGRAM — DMB07 SECTION (5/8) —

- See page 41 for IC Block diagrams.
- See page 37 for Waveforms.
- See page 54 for IC Pin Function Description.

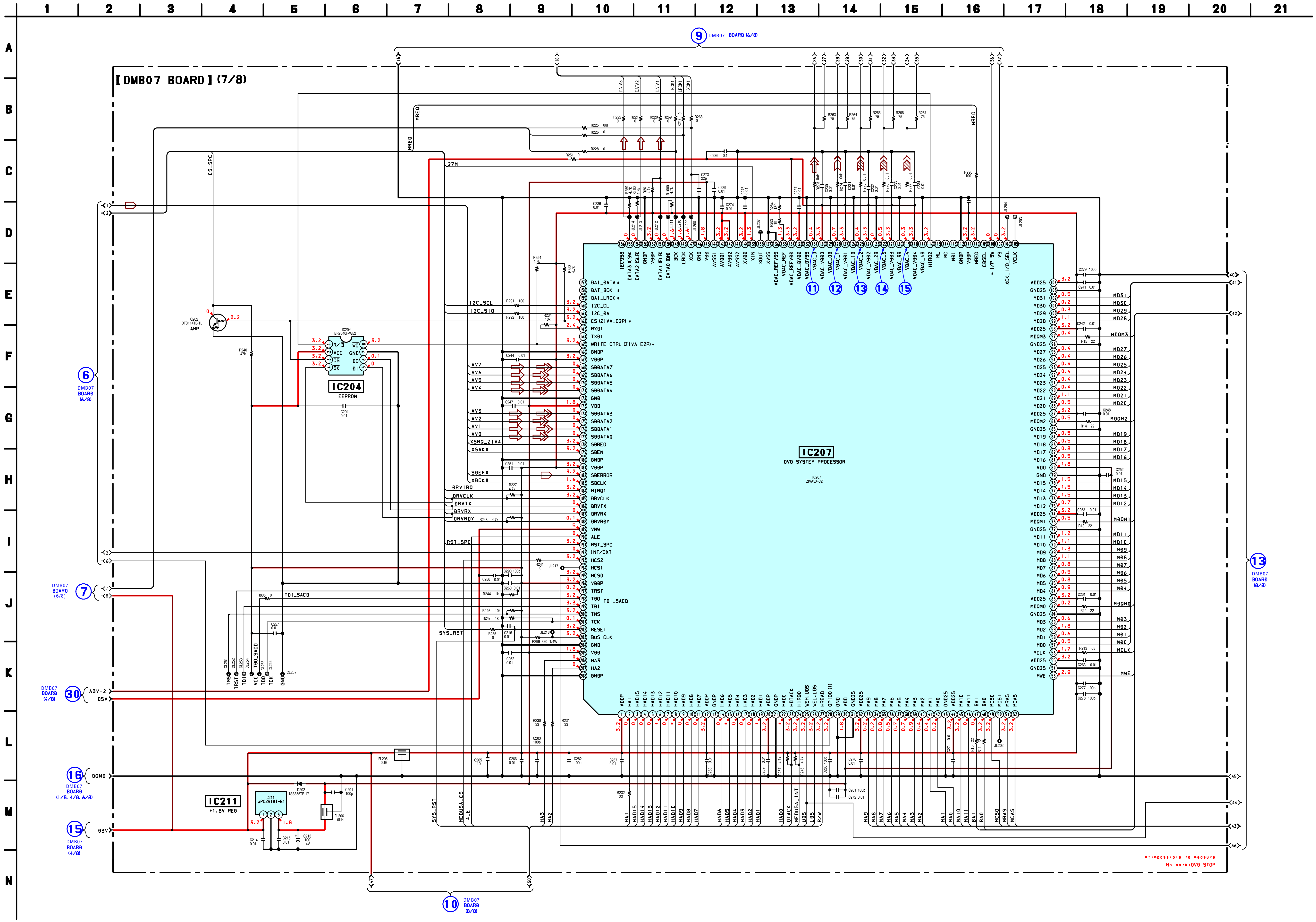

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
A B C D E F G H I J
④ DMB07 BOARD (3/8)
【DMB07 BOARD】(5/8)
⑤ DMB07 BOARD (4/8)
㉜ DMB07 BOARD (6/8)
Ⓕ MAIN BOARD (1/2) CN505 (Page 23)
SAMBA_CTRL_BUS (NO CONNECT)
ZIVA_CTRL_BUS
XRST_DSD
768FS
DSP_BUS
AGND
A3V
SPC970_BUS
D3V
3V-D
ANALOG_BUS
DGND
IC901 MECHANISM CONTROLLER CXP973064-243R
IC902 SWITCHING SN74AHC1G3226DCKR
IC903 EEPROM BR24L16F-WE2
IC B/D
IC904 FLIP-FLOP SN74AHC2G74HDCUR
IC906 CLOCK GENERATOR SM8707GV-G-E2
IC111 UM6K1NLG2TN SWITCH
Q901 DTC114TE-TL LASER DIODE SELECT
X901 20MHz
X902 27MHz
CN101 5P
CN901 7P
IIC DATA
IIC-CLK
M REQ
D GND
SYS.RESET
I2C_SIO
I2C_SCL
MREQ
SYS_RST
RFMON
RF_AC
RST_SPC
TXD
RXD
RF
RF_AC
GND
TXD
RXD
DGND
3V-D
(FOR CHECK)
LDSEL
LOCK
FOK
TSD-M
SCLK
GFS_CD
FE
PI
TE
JIT
SP_ON
SPFG
SLED
MUTE_2D
MUTE_CD
GFS_DVD
SOCK
SHRMUT
SOSO
XMSLAT
F.JMP1
F.JMP2
MD2
SDA
MNT1
SENS
COSP2
COSP4
XCS1882
D0 D1 D2 D3 D4 D5 D6 D7
XINITO
XINITI
MSCK
DRVRDY
CS_SPC
DRVCLK
27M
768FS
JIG_MOD
No mark:DVD STOP

2-12. SCHEMATIC DIAGRAM — DMB07 SECTION (6/8) — • See page 41 for IC Block diagrams.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
【DMB07 BOARD】(6/8)
DMB07 BOARD (3/8)
28
SIGNAL_BUS
32
ZIVA_CTRL_BUS
DMB07 BOARD (5/8)
11
PCM_5.1CH_BUS_A
DMB07 BOARD (1/8)
8
EXT_SIGNAL_BUS
DMB07 BOARD (1/8)
JIG_MOD
INT/EXT
ZIVA_5.1CH_BUS
FLR-A
SLR-A
CSW-A
LRCK-A
BCK-A
MCK-A
DMX-A
JW801 0
JW802 0
JW803 0
JW804 0
JW805 0
JW806 0
DATA1
DATA2
DATA3
LRCK1
BCK1
XCK1
DATA0
R202 47k
3.2
0
Q201
DTC114TE-TL
SWITCH
SD7
SD6
SD5
SD4
SD3
SD2
SD1
SD0
AV7
AV6
AV5
AV4
AV3
AV2
AV1
AV0
R9998 0
R9999 0
IC256
SN74LV573A
PWR
IC256
D-FF
IC B/D
C284 0.01
IC B/D
IC258
D-FF
IC258
SN74LV573A
PWR
XSAK
SDEF
XDCK
XSHD
R9980 0
XSAK#
SDEF#
XDCK#
XSHD#
C286 0.01
IC B/D
IC259
D-FF
R198 4.7k
IC259
SN74LV573A
PWR
R197 4.7k
R293 0
R295 0
R294 0
BCK
ADC-DATA
LRCK
C287 0.01
C9982 0
C9983 0
C9984 0
R9985 0
OE
1D
2D
3D
4D
5D
6D
7D
8D
GND
VCC
1Q
2Q
3Q
4Q
5Q
6Q
7Q
8Q
LE
3.3
1.6
1.0
2.4
1.5
CN105 15P
1 V_GND
2 V
3 V_GND
4 C
5 C_GND
6 Y/G
7 Y/G_GND
8 CB/B
9 CB/B_GND
10 CR/R
11 CR/R_GND
12 VGND
13 V5V
14 I/P SW
15 WIDE
G
IO BOARD CN202 (Page 28)
R201 0
6
DMB07 BOARD (7/8)
DGND
16
DMB07 BOARD (1/8,4/8,7/8)
V5V
VGND
29
DMB07 BOARD (4/8)
CL204
CL206
CL207
CL208
CL209
CL210
CL211
CL212
CL213
CL214
R278 75
R279 75
R280 75
R281 75
R282 75
R271 100
R272 100
7
DMB07 BOARD (7/8)
No mark:DVD STOP
16
18
26
27
28
29
30
31
32
33
34
35
36
37
9
DMB07 BOARD (7/8)

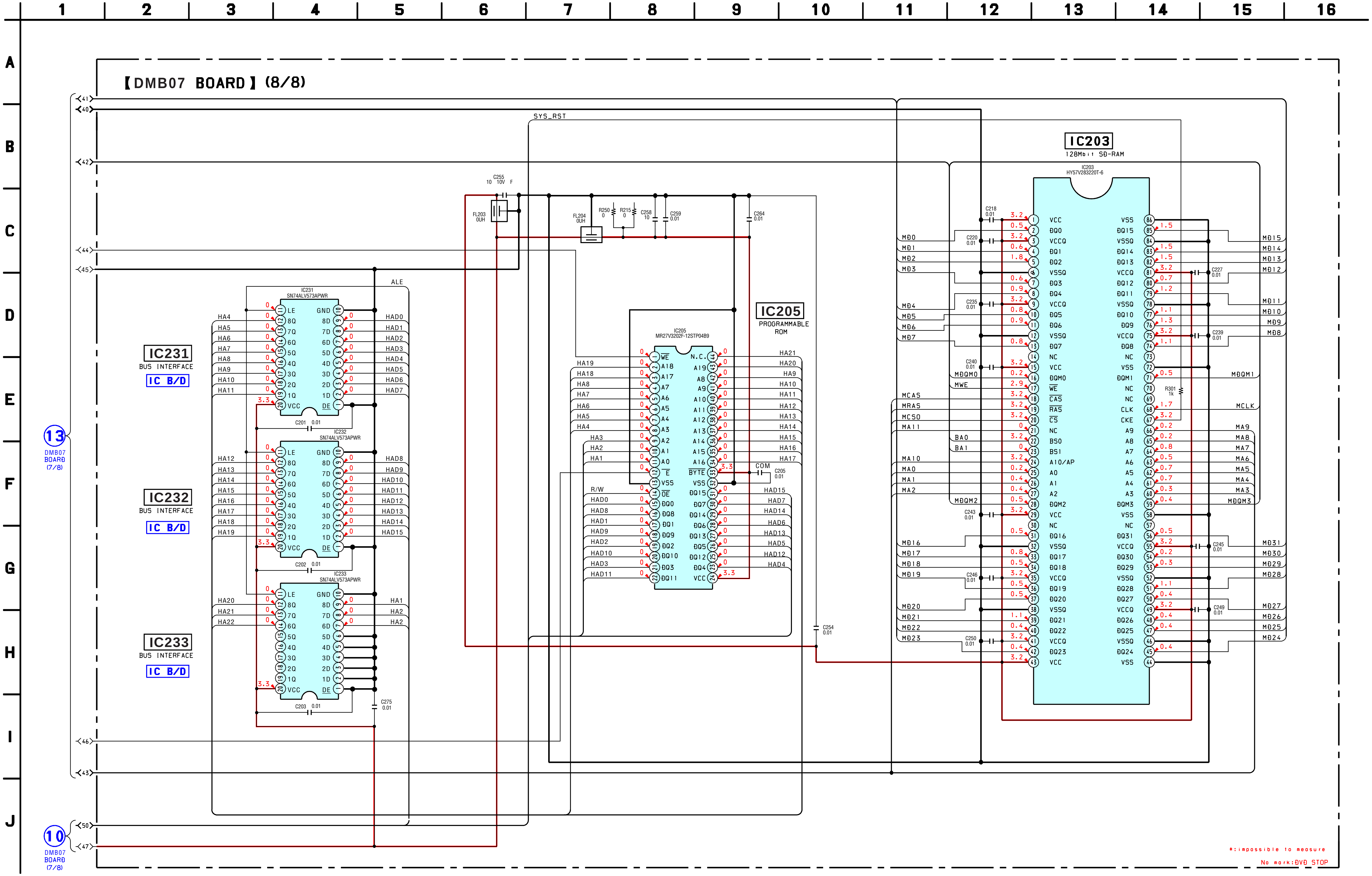
2-13. SCHEMATIC DIAGRAM — DMB07 SECTION (7/8) —

• See page 37, 38 for Waveforms. • See page 45 for IC Pin Function Description.


【DMB07 BOARD】(7/8)
IC207
DVD SYSTEM PROCESSOR
IC207 ZIVA5X-C2F
IC204
EEPROM
IC204 BR9040F-WE2
IC211
+1.8V REG
IC211 μPC2918T-E1
Q202 DTC114TE-TL AMP
D202 1SS355TE-17
9 DMB07 BOARD (6/8)
6 DMB07 BOARD (6/8)
7 DMB07 BOARD (6/8)
30 DMB07 BOARD (4/8)
16 DMB07 BOARD (1/8, 4/8, 6/8)
15 DMB07 BOARD (4/8)
13 DMB07 BOARD (8/8)
10 DMB07 BOARD (8/8)
A3V-2
D5V
DGND
D3V
I2C_SCL
I2C_SIO
TDI_SACD
SYS_RST
27M
MREQ
CS_SPC
*:impossible to measure
No mark:DVD STOP

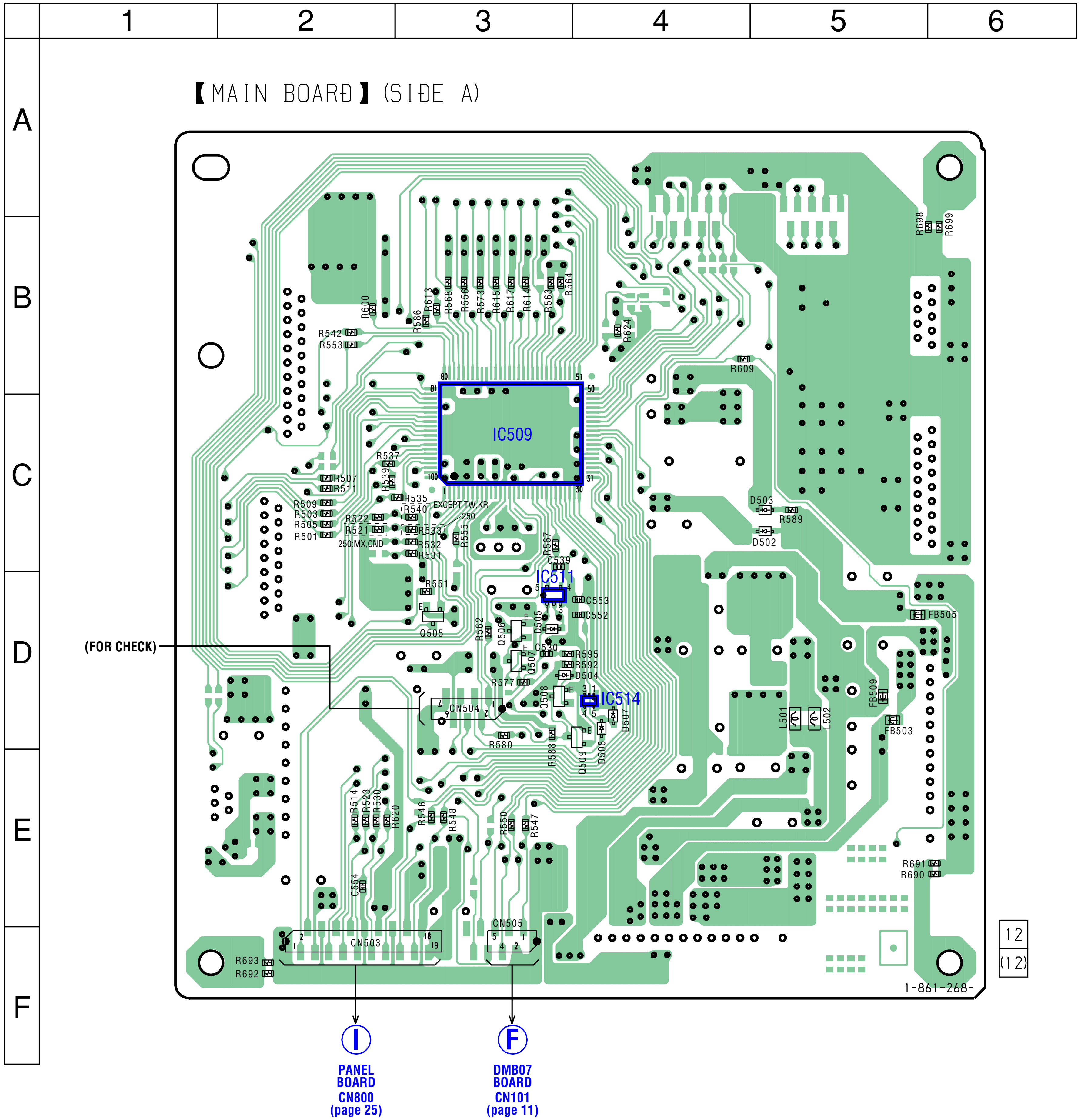
2-14. SCHEMATIC DIAGRAM — DMB07 SECTION (8/8) —

• See page 41 for IC Block diagrams.


【DMB07 BOARD】(8/8)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
A B C D E F G H I J
IC231
BUS INTERFACE
IC B/D
IC231 SN74ALV573APWR
IC232
BUS INTERFACE
IC B/D
IC232 SN74ALV573APWR
IC233
BUS INTERFACE
IC B/D
IC233 SN74ALV573APWR
IC205
PROGRAMMABLE ROM
IC205 MR27V3202F-12STP04B9
IC203
128Mbit SD-RAM
IC203 HY57V283220T-6
SYS_RST
ALE
COM
C255 10 10V F
FL203 0UH
FL204 0UH
R250 0
R215 0
C258 10
C259 0.01
C264 0.01
C201 0.01
C202 0.01
C203 0.01
C275 0.01
C205 0.01
C254 0.01
C218 0.01
C220 0.01
C235 0.01
C240 0.01
C243 0.01
C246 0.01
C250 0.01
C227 0.01
C239 0.01
C245 0.01
C249 0.01
R301 1k
13 DMB07 BOARD (7/8)
10 DMB07 BOARD (7/8)
41 40 42 44 45 46 43 50 47
MD0 MD1 MD2 MD3 MD4 MD5 MD6 MD7
MD8 MD9 MD10 MD11 MD12 MD13 MD14 MD15
MD16 MD17 MD18 MD19 MD20 MD21 MD22 MD23
MD24 MD25 MD26 MD27 MD28 MD29 MD30 MD31
MDQM0 MDQM1 MDQM2 MDQM3 MWE MCAS MRAS MCS0 MCLK
MA0 MA1 MA2 MA3 MA4 MA5 MA6 MA7 MA8 MA9 MA10 MA11 BA0 BA1
HA1 HA2 HA3 HA4 HA5 HA6 HA7 HA8 HA9 HA10 HA11 HA12 HA13 HA14 HA15 HA16 HA17 HA18 HA19 HA20 HA21 HA22
HAD0 HAD1 HAD2 HAD3 HAD4 HAD5 HAD6 HAD7 HAD8 HAD9 HAD10 HAD11 HAD12 HAD13 HAD14 HAD15
R/W
LE GND 8Q 7Q 6Q 5Q 4Q 3Q 2Q 1Q VCC 8D 7D 6D 5D 4D 3D 2D 1D OE
WE A18 A17 A7 A6 A5 A4 A3 A2 A1 A0 E VSS OE DQ0 DQ8 DQ1 DQ9 DQ2 DQ10 DQ3 DQ11
N.C. A19 A8 A9 A10 A11 A12 A13 A14 A15 A16 BYTE VSS DQ15 DQ7 DQ14 DQ6 DQ13 DQ5 DQ12 DQ4 VCC
VCC DQ0 VCCQ DQ1 DQ2 VSSQ DQ3 DQ4 VCCQ DQ5 DQ6 VSSQ DQ7 NC VCC DQM0 WE CAS RAS CS NC BS0 BS1 A10/AP A0 A1 A2 DQM2 VCC NC DQ16 VSSQ DQ17 DQ18 VCCQ DQ19 DQ20 VSSQ DQ21 DQ22 VCCQ DQ23 VCC
VSS DQ15 VSSQ DQ14 DQ13 VCCQ DQ12 DQ11 VSSQ DQ10 DQ9 VCCQ DQ8 NC VSS DQM1 NC NC CLK CKE A9 A8 A7 A6 A5 A4 A3 DQM3 VSS NC DQ31 VCCQ DQ30 DQ29 VSSQ DQ28 DQ27 VCCQ DQ26 DQ25 VSSQ DQ24 VSS
*:impossible to measure
No mark:DVD STOP

2-15. PRINTED WIRING BOARD — MAIN SECTION (SIDE A) —

: Uses unleaded solder. • See page 36 for Circuit Boards Location.

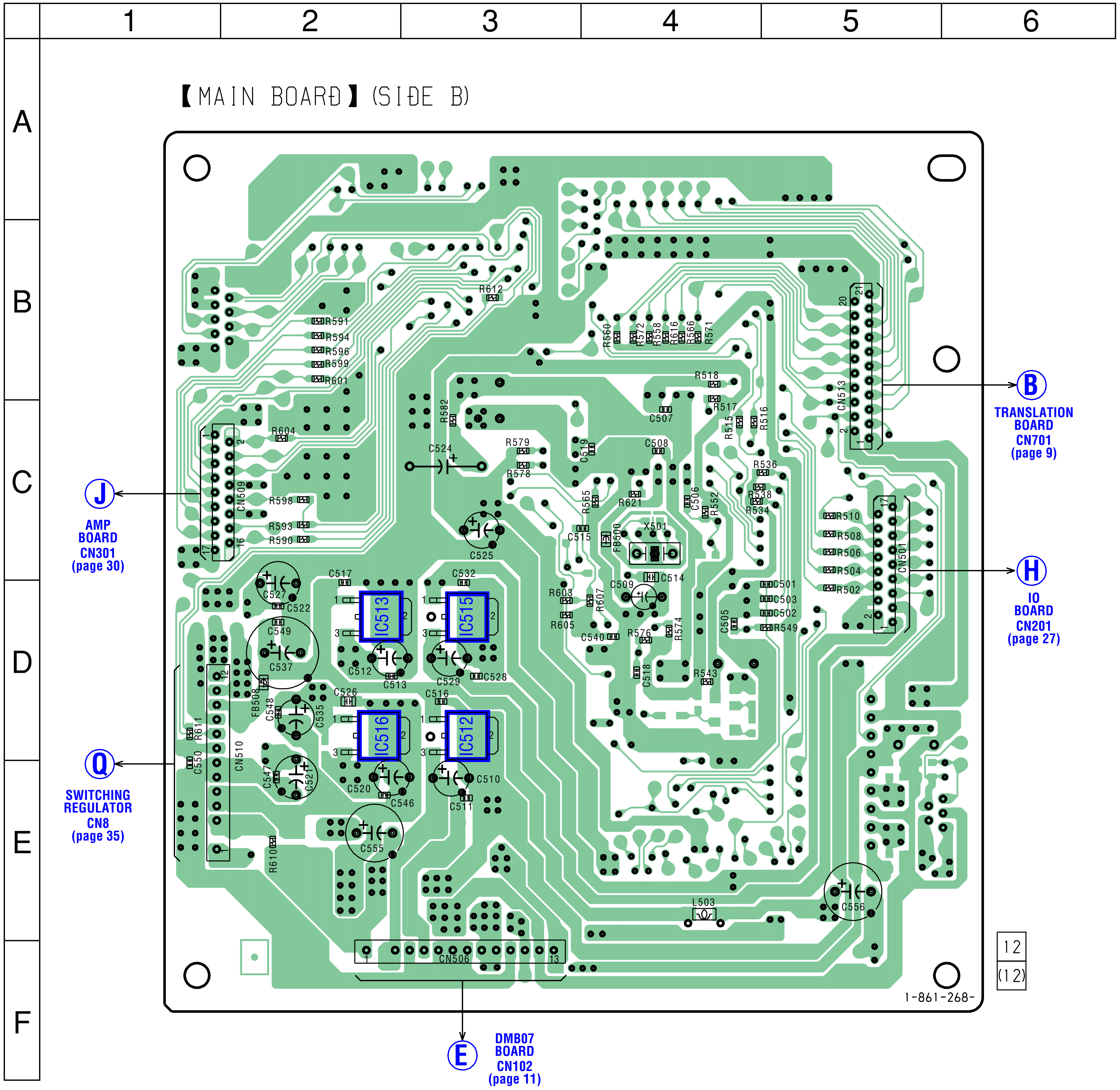

1
2
3
4
5
6
A
B
C
D
E
F
【MAIN BOARD】(SIDE A)
(FOR CHECK)
IC509
IC511
IC514
R600
R586
R613
R568
R556
R573
R615
R617
R614
R563
R564
R624
R542
R553
R609
R698
R699
R537
R539
R507
R511
R509
R503
R505
R501
R535
R540
R522
R521
R533
R532
R531
R555
R567
C539
D503
R589
D502
EXCEPT TW,KR
250
250:MX,CND
R551
C553
C552
Q505
R562
Q506
D505
C530
Q507
R595
R592
D504
R577
Q508
CN504
D507
R580
R588
Q509
D508
L501
L502
FB505
FB509
FB503
R514
R523
R530
R620
R546
R548
R550
R547
C554
R691
R690
CN503
CN505
R693
R692
1-861-268-
12
(12)
PANEL
BOARD
CN800
(page 25)
DMB07
BOARD
CN101
(page 11)

- **Semiconductor Location**

Ref. No.	Location
D502	C-4
D503	C-4
D504	D-3
D505	D-3
D507	D-4
D508	D-4
IC509	C-3
IC511	C-3
IC514	D-4
Q505	D-3
Q506	D-3
Q507	D-3
Q508	D-3
Q509	E-4

2-16. PRINTED WIRING BOARD — MAIN SECTION (SIDE B) —

LF :Uses unleaded solder. • See page 36 for Circuit Boards Location.

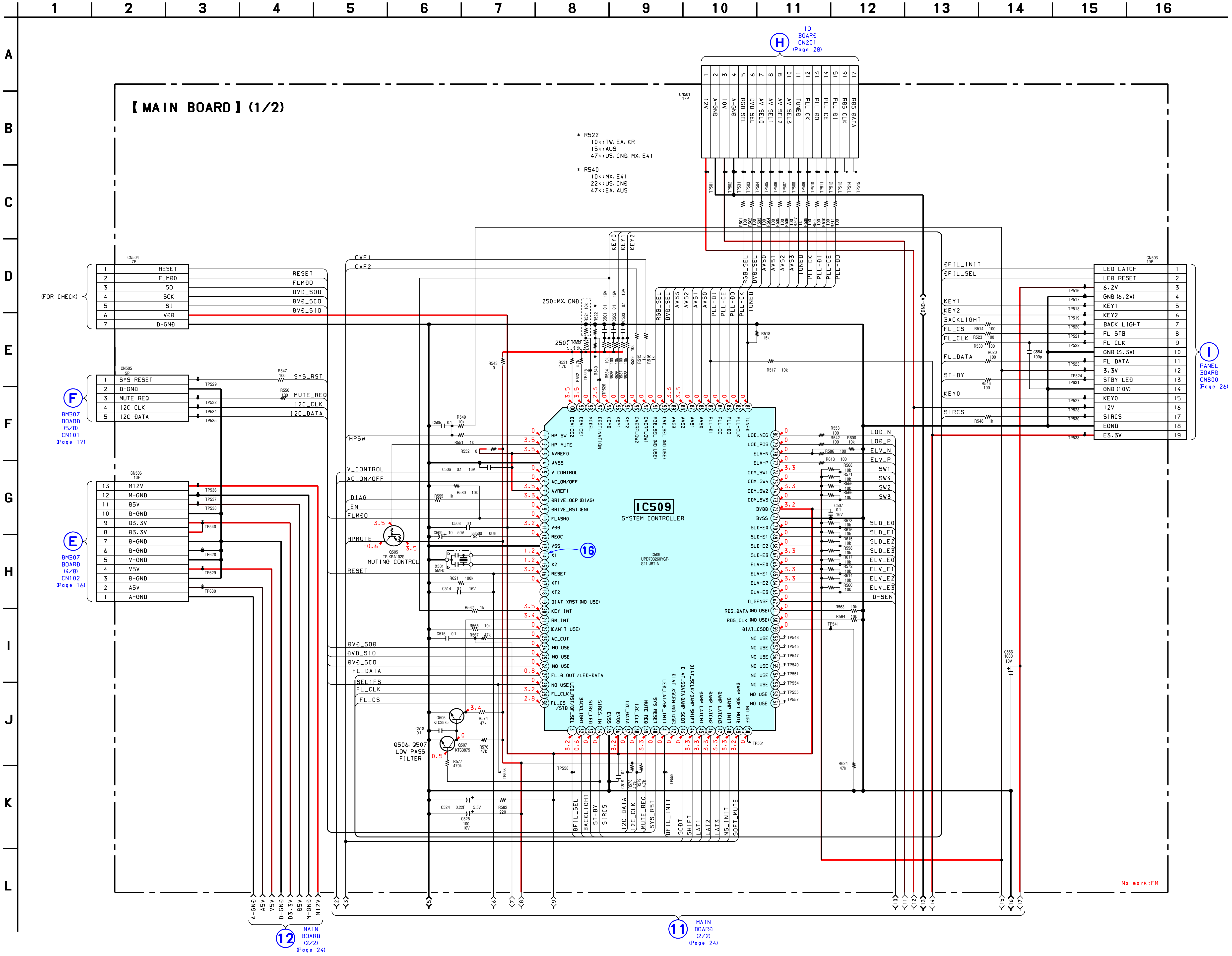

1
2
3
4
5
6
A
B
C
D
E
F
【MAIN BOARD】(SIDE B)
IC513
IC515
IC516
IC512
CN509
CN510
CN506
CN513
CN501
X501
L503
FB500
FB508
C501
C502
C503
C505
C506
C507
C508
C509
C510
C511
C512
C513
C514
C515
C517
C518
C519
C520
C521
C522
C524
C525
C526
C527
C528
C529
C532
C535
C537
C540
C546
C547
C548
C549
C550
C555
C556
R502
R504
R506
R508
R510
R515
R516
R517
R518
R534
R536
R538
R543
R549
R552
R556
R558
R560
R565
R566
R571
R572
R574
R576
R578
R579
R582
R590
R591
R593
R594
R596
R598
R599
R601
R603
R604
R605
R607
R610
R611
R612
R616
R621
1-861-268-
12
(12)
B
TRANSLATION BOARD CN701 (page 9)
H
IO BOARD CN201 (page 27)
J
AMP BOARD CN301 (page 30)
Q
SWITCHING REGULATOR CN8 (page 35)
E
DMB07 BOARD CN102 (page 11)

- **Semiconductor Location**

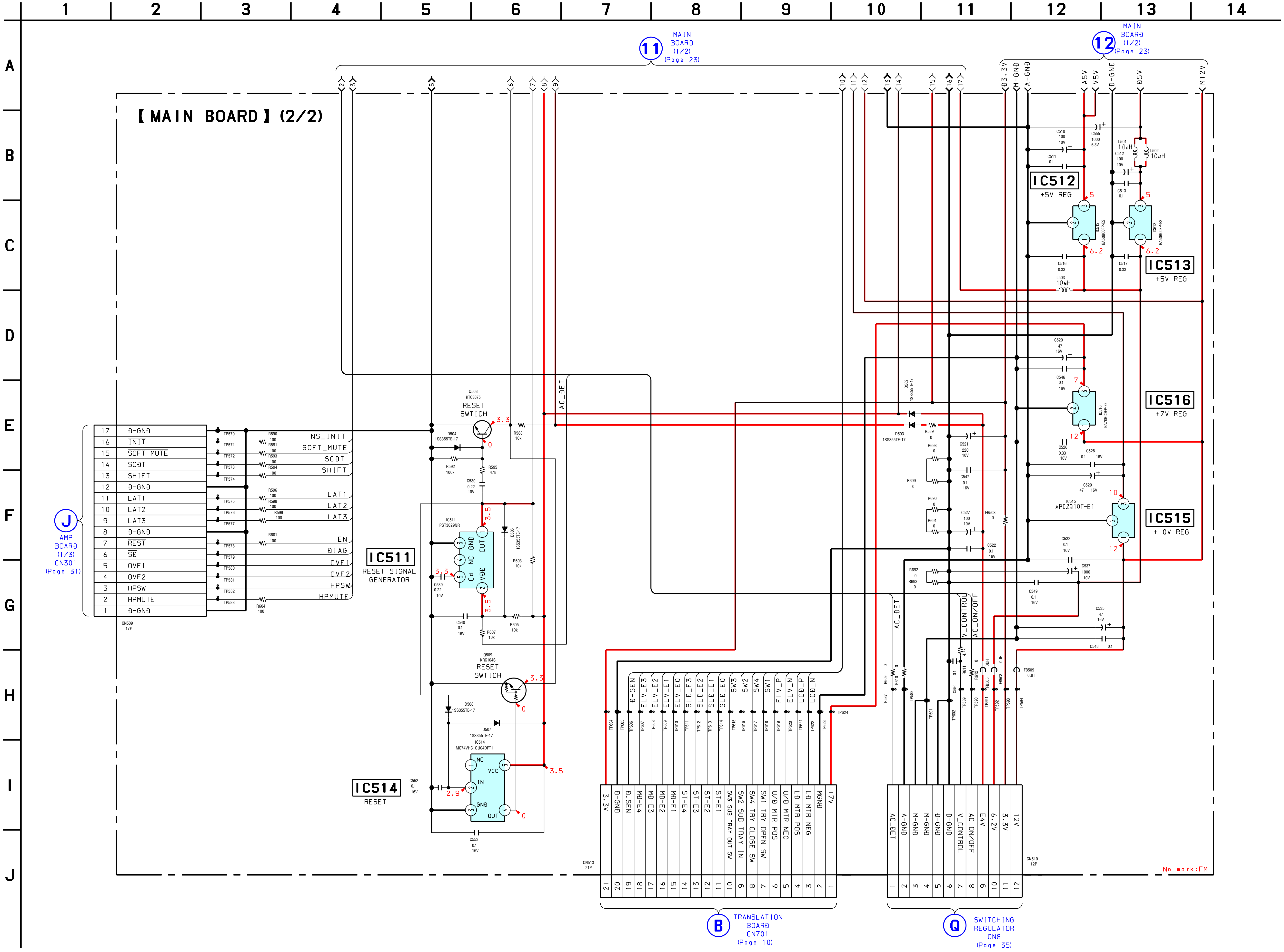
Ref. No.	Location
IC512	D-3
IC513	D-2
IC515	D-3
IC516	D-2

2-17. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

• See page 38 for Waveforms. • See page 56 for IC Pin Function Description.

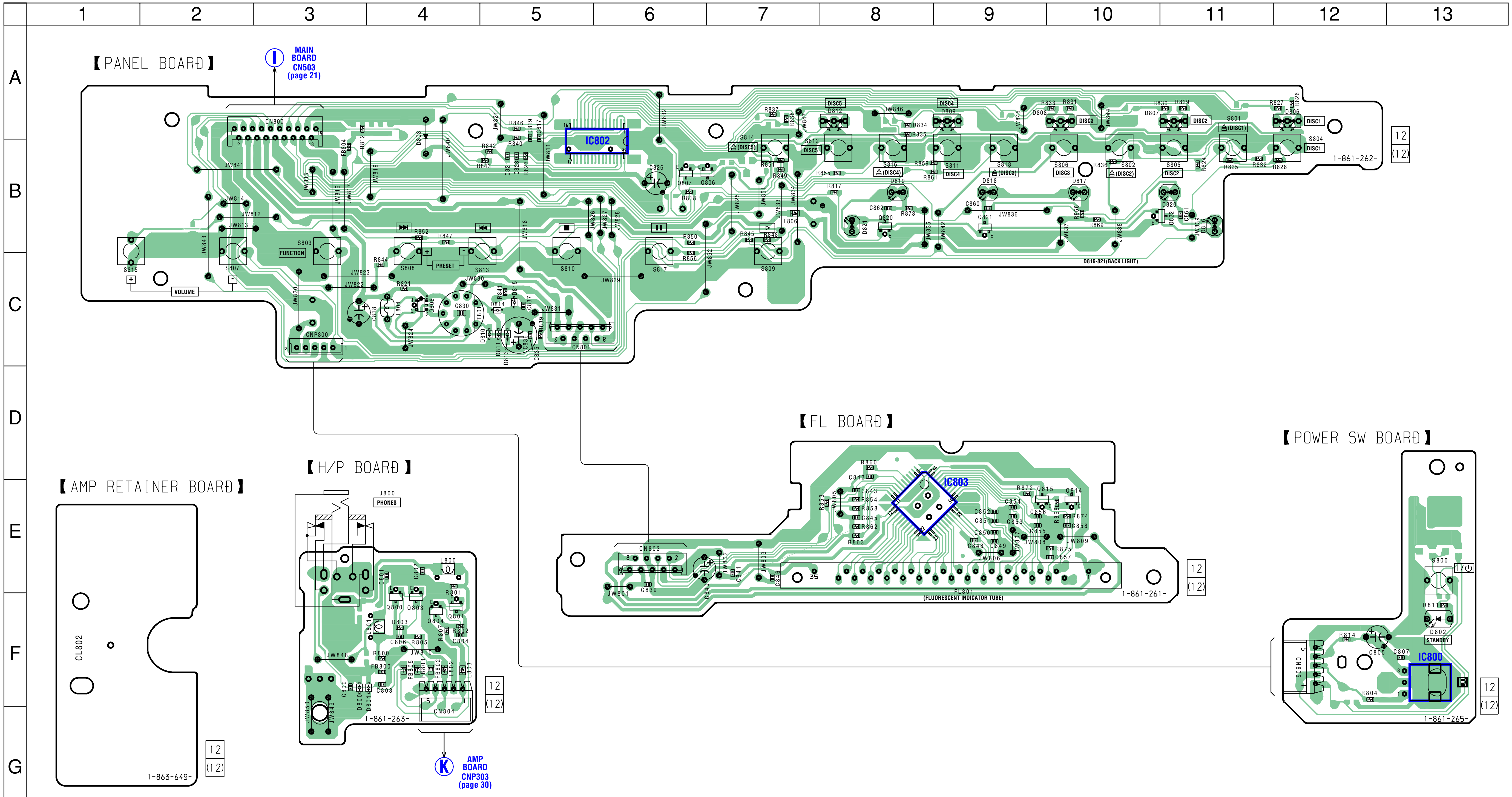

【MAIN BOARD】(1/2)
IC509
SYSTEM CONTROLLER
IC509 UPD703260YGF-S21-JBT-A
H IO BOARD CN201 (Page 28)
CN501 17P
12V A-GND 10V A-GND RGB SEL DVD SEL AV SEL0 AV SEL1 AV SEL2 AV SEL3 TUNED PLL CK PLL CE PLL DI PLL DO RDS CLK RDS DATA
• R522 10k : TW, EA, KR 15k : AUS 47k : US, CND, MX, E41
• R540 10k : MX, E41 22k : US, CND 47k : EA, AUS
CN504 7P
(FOR CHECK)
RESET FLMD0 SO SCK SI VDD D-GND
CN505 5P
SYS RESET D-GND MUTE REQ I2C CLK I2C DATA
F DMB07 BOARD (5/8) CN101 (Page 17)
CN506 13P
M12V M-GND D5V D-GND D3.3V D3.3V D-GND D-GND V-GND V5V D-GND A5V A-GND
E DMB07 BOARD (4/8) CN102 (Page 16)
250 : MX, CND
HPSW
V_CONTROL
AC_ON/OFF
DIAG
EN
FLMD0
HPMUTE
Q505 TR KRA102S MUTING CONTROL
RESET
X501 5MHz
DVD_SOD DVD_SIO DVD_SCO FL_DATA SELIFS FL_CLK FL_CS
Q506, Q507 LOW PASS FILTER
Q506 KTC3875 Q507 KTC3875
CN503 19P
LED LATCH LED RESET 6.2V GND (6.2V) KEY1 KEY2 BACK LIGHT FL STB FL CLK GND (3.3V) FL DATA 3.3V STBY LED GND (10V) KEY0 12V SIRCS EGND E3.3V
I PANEL BOARD CN800 (Page 26)
DFIL_INIT DFIL_SEL KEY1 KEY2 BACKLIGHT FL_CS FL_CLK FL_DATA ST-BY KEY0 SIRCS
LOD_N LOD_P ELV_N ELV_P SW1 SW4 SW2 SW3 SLD_E0 SLD_E1 SLD_E2 SLD_E3 ELV_E0 ELV_E1 ELV_E2 ELV_E3 D-SEN
A-GND A5V V5V D-GND D3.3V D5V M-GND M12V
12 MAIN BOARD (2/2) (Page 24)
11 MAIN BOARD (2/2) (Page 24)
No mark : FM
A B C D E F G H I J K L
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

2-18. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) —


【MAIN BOARD】(2/2)
MAIN BOARD (1/2) (Page 23)
MAIN BOARD (1/2) (Page 23)
J AMP BOARD (1/3) CN301 (Page 31)
B TRANSLATION BOARD CN701 (Page 10)
Q SWITCHING REGULATOR CN8 (Page 35)
IC511 RESET SIGNAL GENERATOR
IC512 +5V REG
IC513 +5V REG
IC514 RESET
IC515 +10V REG
IC516 +7V REG
Q508 KTC3875 RESET SWTICH
Q509 KRC104S RESET SWTICH
CN509 17P
CN513 21P
CN510 12P
D-GND
INIT
SOFT MUTE
SCDT
SHIFT
LAT1
LAT2
LAT3
REST
SD
OVF1
OVF2
HPSW
HPMUTE
NS_INIT
SOFT_MUTE
EN
DIAG
AC_DET
D3.3V
M-GND
A-GND
A5V
V5V
D5V
M12V
3.3V
D.SEN
MD-E4
MD-E3
MD-E2
MD-E1
ST-E4
ST-E3
ST-E2
ST-E1
SW3 SUB TRAY OUT SW
SW2 SUB TRAY IN
SW4 TRY CLOSE SW
SW1 TRY OPEN SW
U/D MTR POS
U/D MTR NEG
LD MTR POS
LD MTR NEG
MGND
+7V
V_CONTROL
AC_ON/OFF
E4V
6.2V
12V
No mark:FM
1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J

2-19. PRINTED WIRING BOARD — PANEL/FL/POWER SW/H/P/AMP RETAINER SECTION —

Ⓛ :Uses unleaded solder. • See page 36 for Circuit Boards Location.


1
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3
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7
8
9
10
11
12
13
A
B
C
D
E
F
G
【PANEL BOARD】
Ⓘ MAIN BOARD CN503 (page 21)
CN800
IC802
VOLUME
FUNCTION
PRESET
CNP800
CN801
D816-821(BACK LIGHT)
1-861-262-
12 (12)
【FL BOARD】
IC803
CN803
FL801 (FLUORESCENT INDICATOR TUBE)
1-861-261-
12 (12)
【POWER SW BOARD】
S800
STANDBY
IC800
CN805
1-861-265-
12 (12)
【AMP RETAINER BOARD】
CL802
1-863-649-
12 (12)
【H/P BOARD】
J800
PHONES
CN804
1-861-263-
12 (12)
Ⓚ AMP BOARD CNP303 (page 30)

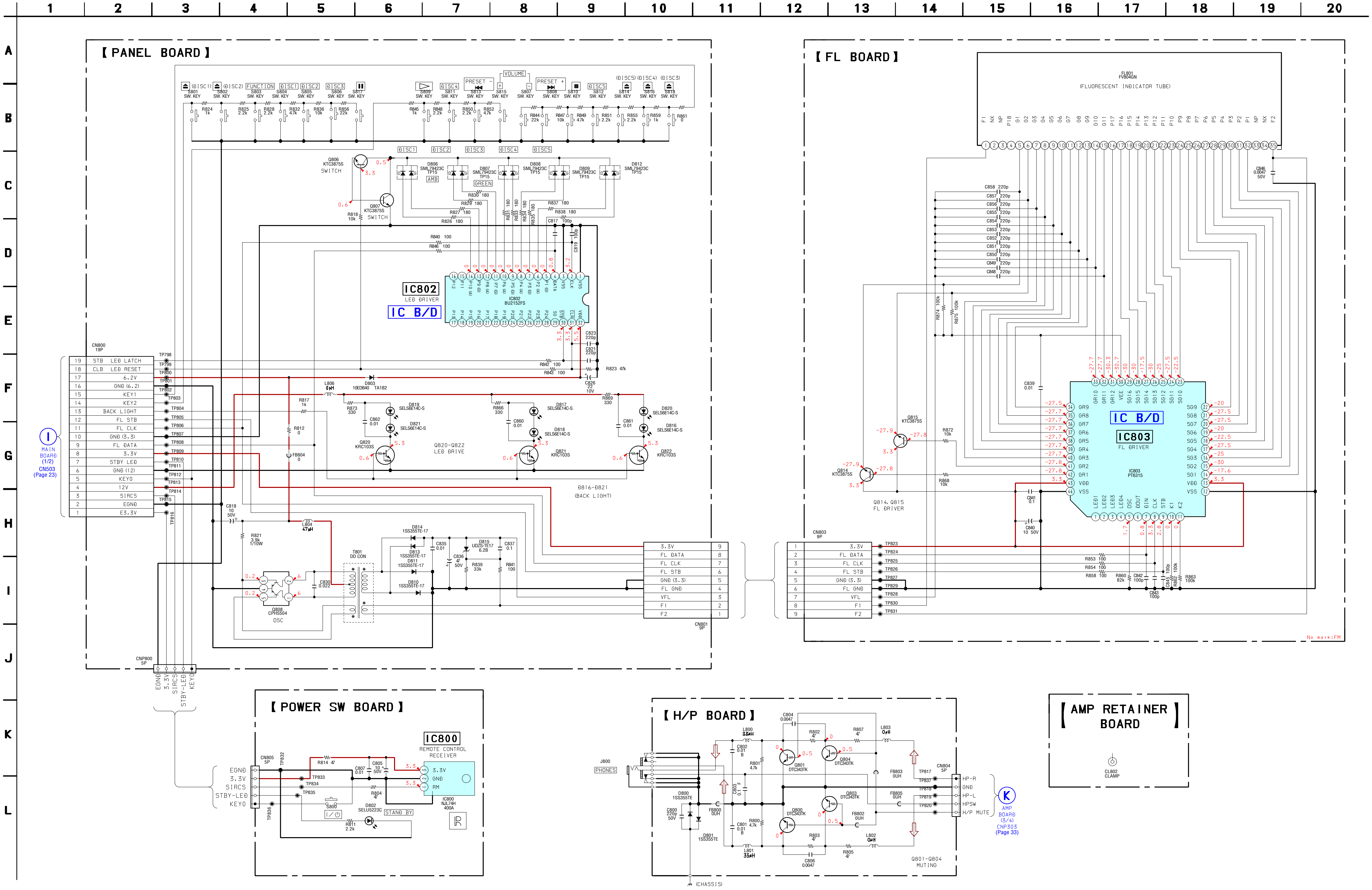
- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D800	F-3	D814	C-5	Q800	F-3
D801	F-3	D815	C-5	Q801	F-4
D802	E-13	D816	B-11	Q803	F-4
D803	B-4	D817	B-17	Q804	F-4
D806	A-12	D818	B-9	Q806	B-6
D807	A-11	D819	B-8	Q807	B-7
D808	A-10	D820	B-11	Q808	C-4
D809	A-9	D821	B-8	Q814	E-10
D810	C-4			Q815	E-9
D811	C-5	IC800	F-13	Q820	B-8
D812	A-8	IC802	B-6	Q821	B-9
D813	C-5	IC803	D-9	Q822	B-11

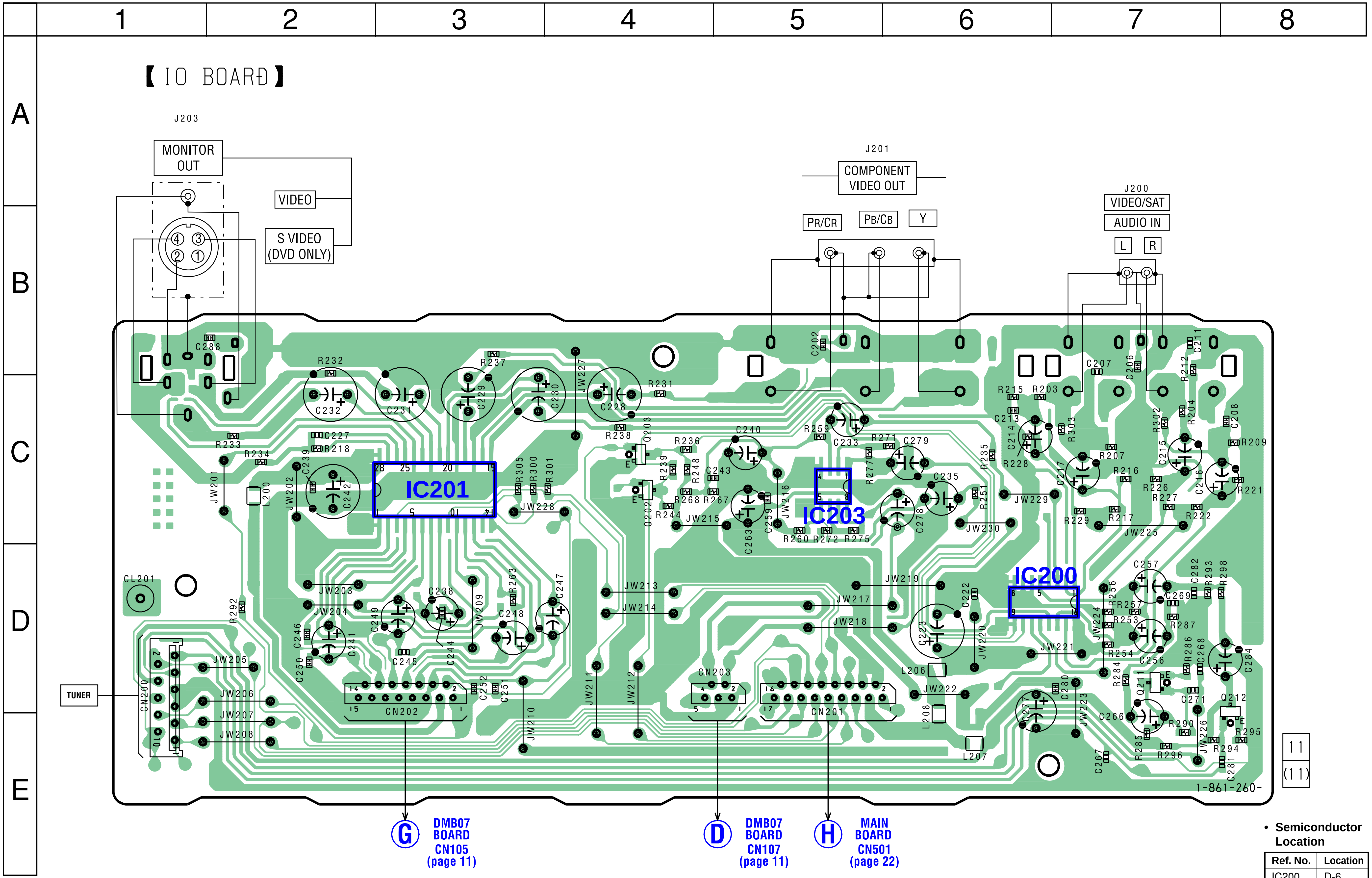
Ver 1.3

2-20. SCHEMATIC DIAGRAM — PANEL/FL/POWER SW/H/P/AMP RETAINER SECTION —

• See page 40 for IC Block diagrams.


【 PANEL BOARD 】
【 FL BOARD 】
【 POWER SW BOARD 】
【 H/P BOARD 】
【 AMP RETAINER BOARD 】
IC802
LED DRIVER
IC B/D
IC803
FL DRIVER
IC800
REMOTE CONTROL RECEIVER
FL801
FV804GN
(FLUORESCENT INDICATOR TUBE)
Q806 KTC3875S SWITCH
Q807 KTC3875S SWITCH
Q820-Q822 LED DRIVE
D816-D821 (BACK LIGHT)
Q814, Q815 FL DRIVER
Q808 CPH3504 OSC
Q801-Q804 MUTING
CN800 19P
CN801 9P
CN803 9P
CN805 5P
CNP800 5P
CN804 5P
J800 PHONES
I MAIN BOARD (1/2) CN503 (Page 23)
K AMP BOARD (3/4) CNP303 (Page 33)
CL802 CLAMP
(CHASSIS)
No mark:FM

2-21. PRINTED WIRING BOARD — IO SECTION — :Uses unleaded solder. • See page 36 for Circuit Boards Location.


1
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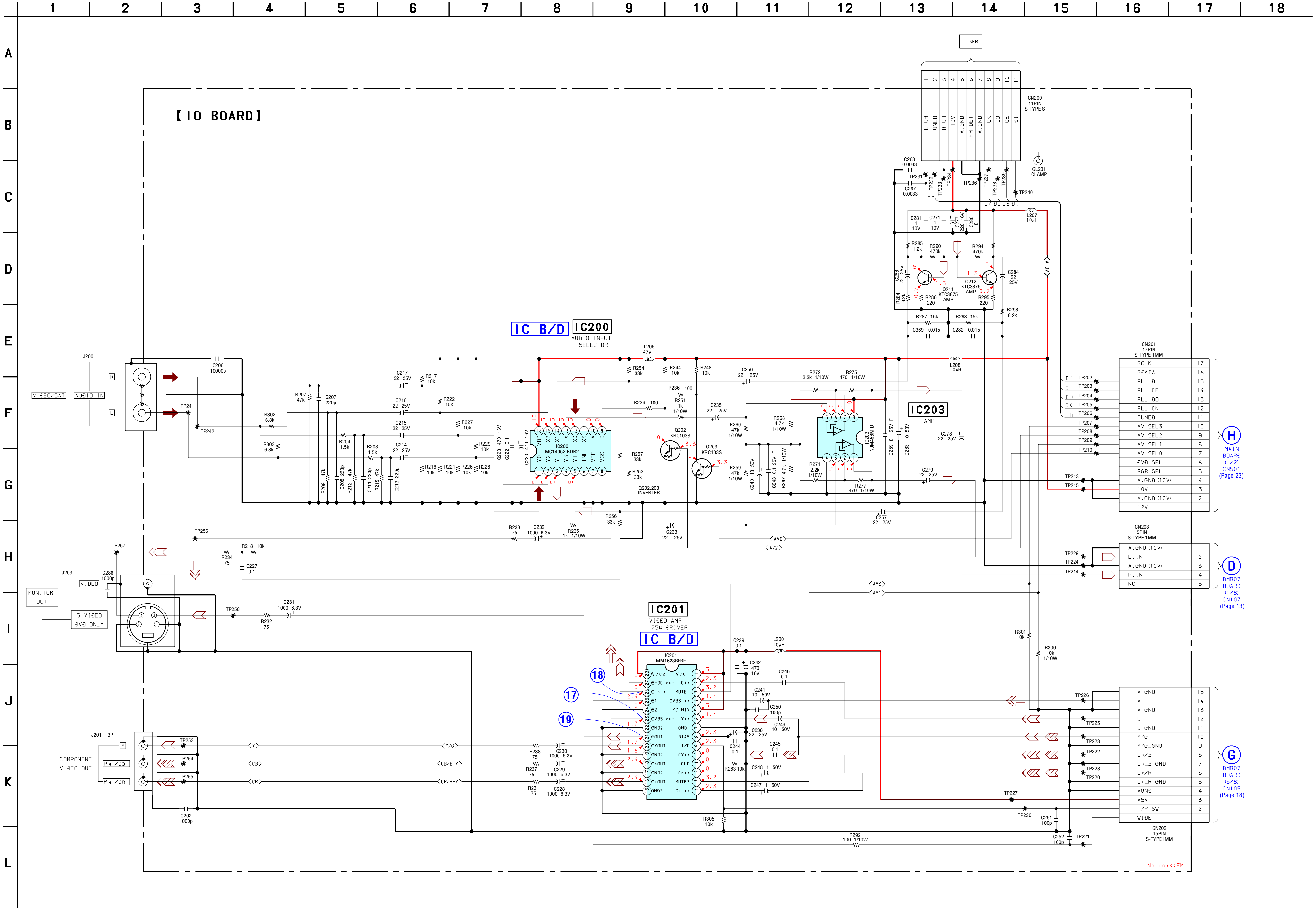
6
7
8
A
B
C
D
E
【IO BOARD】
J203
MONITOR OUT
VIDEO
S VIDEO (DVD ONLY)
④ ③
② ①
J201
COMPONENT VIDEO OUT
PR/CR
PB/CB
Y
J200
VIDEO/SAT
AUDIO IN
L
R
C288
R232
R237
JW227
R231
C202
C211
C207
C206
R212
R215
R203
C232
C231
C229
C230
C228
R238
Q203
C227
R218
R233
R234
C239
C242
IC201
R305
R300
R301
JW228
R236
R239
R248
C240
C243
R268
R267
R244
JW215
C263
C259
JW216
Q202
R259
C233
IC203
R260
R272
R275
R271
C279
R277
C235
C278
R235
R251
JW229
JW230
C213
C214
R228
R303
R207
C217
R216
R229
R217
JW225
R302
R204
C208
R209
C215
C216
R226
R227
R222
R221
JW201
L200
JW202
CL201
R292
JW203
JW204
C246
C241
C250
C249
C238
C245
C244
JW209
R263
C248
C247
C252
C251
JW205
JW206
JW207
JW208
TUNER
CN200
CN202
JW210
JW211
JW212
JW213
JW214
CN203
CN201
JW219
JW217
JW218
C222
C223
JW220
L206
JW222
L208
IC200
JW221
JW224
R256
C257
C269
R257
R253
R254
R284
C256
R287
R286
C268
R282
R293
R298
C284
Q211
C271
Q212
C280
C277
JW223
C266
R290
R285
R296
R294
R295
JW226
C281
C267
L207
1-861-260-
11
(11)
G
DMB07 BOARD CN105 (page 11)
D
DMB07 BOARD CN107 (page 11)
H
MAIN BOARD CN501 (page 22)

- **Semiconductor Location**

Ref. No.	Location
IC200	D-6
IC201	C-3
IC203	C-5
Q202	C-4
Q203	C-4
Q211	D-7
Q212	D-8

2-22. SCHEMATIC DIAGRAM — IO SECTION — • See page 38 for Waveforms. • See page 43 for IC Block diagrams.


1
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3
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7
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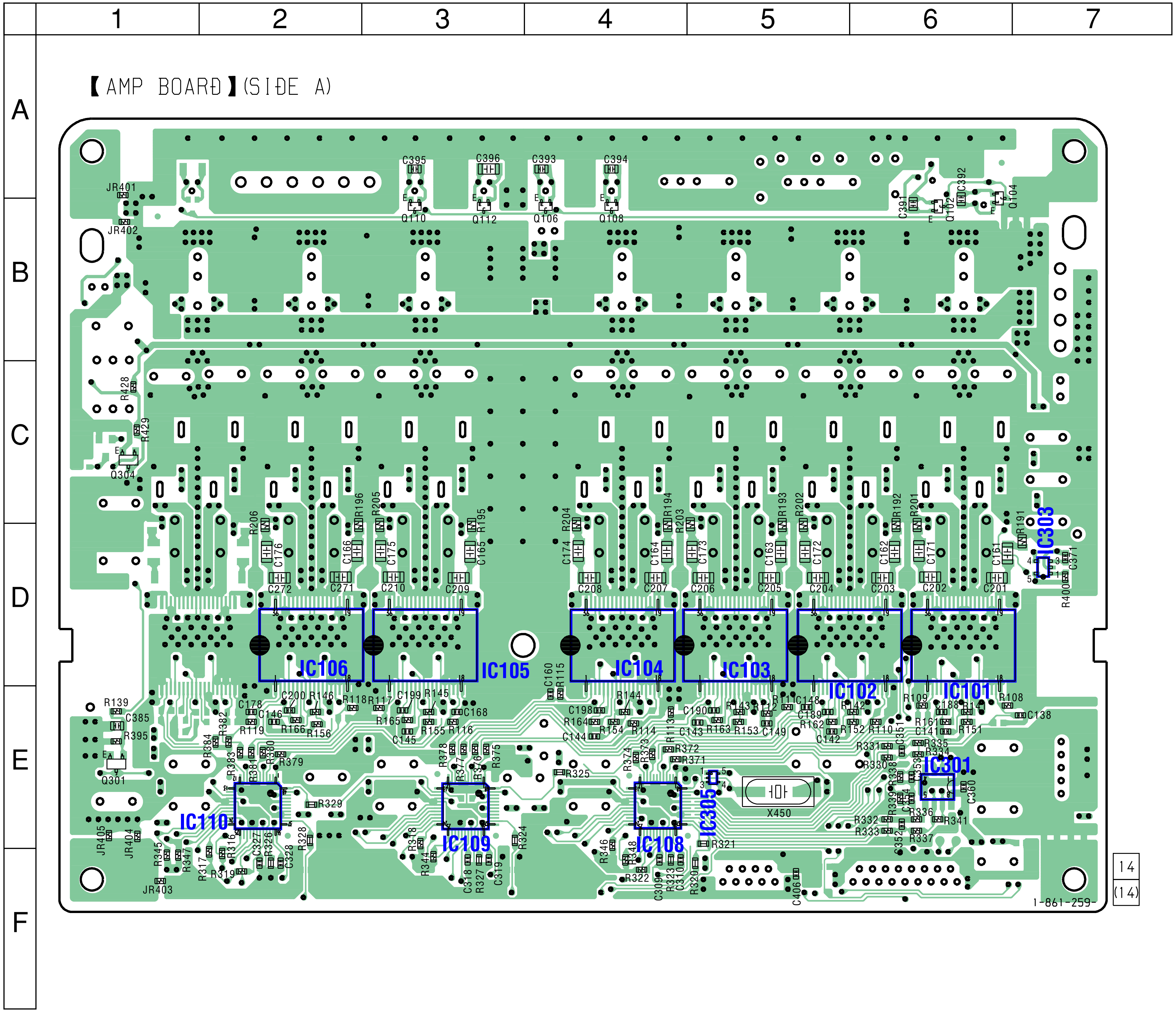
9
10
11
12
13
14
15
16
17
18
A
B
C
D
E
F
G
H
I
J
K
L
【IO BOARD】
TUNER
CN200
11PIN
S-TYPE S
L-CH
TUNED
R-CH
10V
A.GND
FM-DET
A.GND
CK
DO
CE
DI
CL201
CLAMP
IC B/D
IC200
AUDIO INPUT
SELECTOR
IC200
MC14052 BDR2
IC203
AMP
IC203
NJM4558M-D
Q202,203
INVERTER
Q202
KRC103S
Q203
KRC103S
Q211
KTC3875
AMP
Q212
KTC3875
AMP
J200
VIDEO/SAT
AUDIO IN
TP241
TP242
J203
MONITOR
OUT
VIDEO
S VIDEO
DVD ONLY
TP256
TP257
TP258
IC201
VIDEO AMP.
75Ω DRIVER
IC B/D
IC201
MM1623BFBE
18
17
19
J201 3P
COMPONENT
VIDEO OUT
Y
PB /CB
PR /CR
TP253
TP254
TP255
AV0
AV1
AV2
AV3
Y/G
CB/B-Y
CR/R-Y
CN201
17PIN
S-TYPE 1MM
RCLK
RDATA
PLL DI
PLL CE
PLL DO
PLL CK
TUNED
AV SEL3
AV SEL2
AV SEL1
AV SEL0
DVD SEL
RGB SEL
A.GND (10V)
10V
A.GND (10V)
12V
H
MAIN
BOARD
(1/2)
CN501
(Page 23)
CN203
5PIN
S-TYPE 1MM
A.GND (10V)
L.IN
A.GND (10V)
R.IN
NC
D
DMB07
BOARD
(1/8)
CN107
(Page 13)
CN202
15PIN
S-TYPE IMM
V_GND
V
V_GND
C
C_GND
Y/G
Y/G_GND
CB/B
CB_B GND
CR/R
CR_R GND
VGND
V5V
I/P SW
WIDE
G
DMB07
BOARD
(6/8)
CN105
(Page 18)
No mark:FM

2-23. PRINTED WIRING BOARD — AMP SECTION (SIDE A) —

:Uses unleaded solder. • See page 36 for Circuit Boards Location.

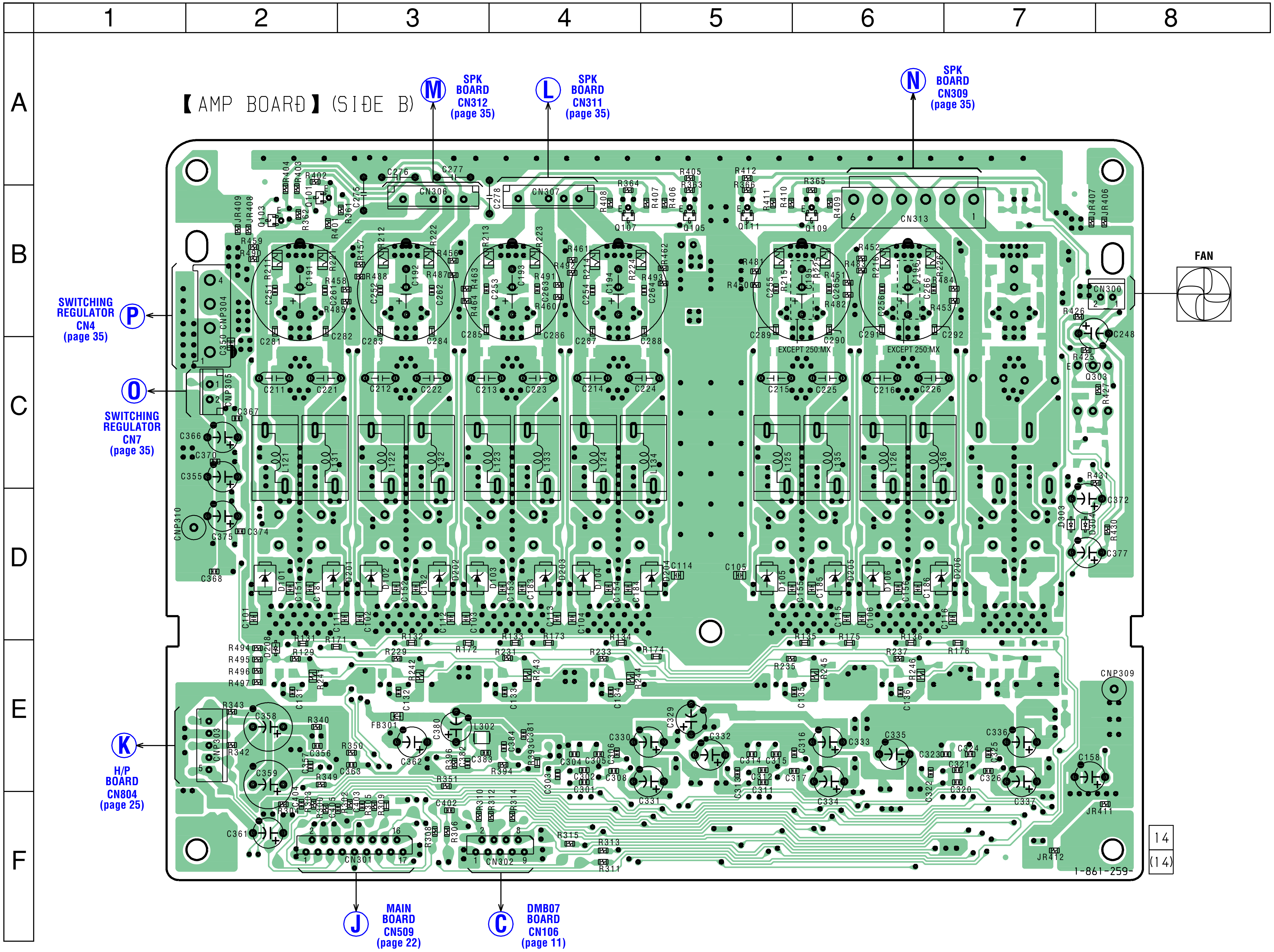

1
2
3
4
5
6
7
A
B
C
D
E
F
【AMP BOARD】(SIDE A)
IC101
IC102
IC103
IC104
IC105
IC106
IC108
IC109
IC110
IC301
IC303
IC305
Q102
Q104
Q106
Q108
Q110
Q112
Q301
Q304
X450
JR401
JR402
JR403
JR404
JR405
14
(14)
1-861-259-

• **Semiconductor Location**

Ref. No.	Location
IC101	D-6
IC102	D-6
IC103	D-5
IC104	D-4
IC105	D-3
IC106	D-2
IC108	E-4
IC109	E-3
IC110	E-2
IC301	E-6
IC303	D-7
IC305	E-5
Q102	A-6
Q104	A-6
Q106	B-4
Q108	B-4
Q110	B-3
Q112	B-3
Q301	E-1
Q304	C-1

2-24. PRINTED WIRING BOARD — AMP SECTION (SIDE B) —

LF :Uses unleaded solder. • See page 36 for Circuit Boards Location.

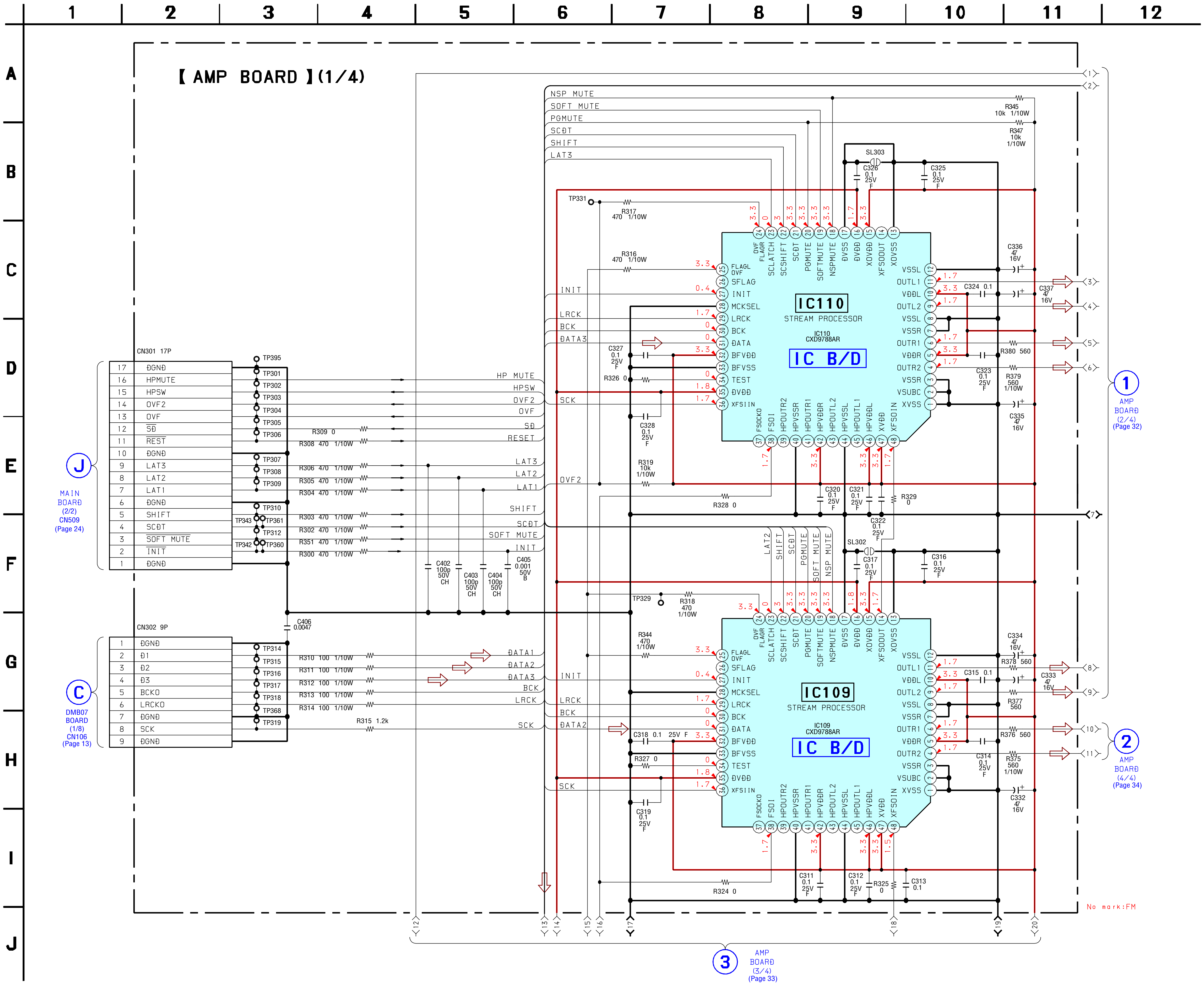

1
2
3
4
5
6
7
8
A
B
C
D
E
F
【AMP BOARD】(SIDE B)
M SPK BOARD CN312 (page 35)
L SPK BOARD CN311 (page 35)
N SPK BOARD CN309 (page 35)
P SWITCHING REGULATOR CN4 (page 35)
O SWITCHING REGULATOR CN7 (page 35)
K H/P BOARD CN804 (page 25)
J MAIN BOARD CN509 (page 22)
C DMB07 BOARD CN106 (page 11)
FAN
CN300
CN301
CN302
CN304
CN306
CN307
CN313
CNP303
CNP305
CNP309
CNP310
EXCEPT 250:MX
1-861-259-
14
(14)

- **Semiconductor Location**

Ref. No.	Location
D101	D-2
D102	D-3
D103	D-3
D104	D-4
D105	D-5
D106	D-6
D201	D-2
D202	D-3
D203	D-4
D204	D-5
D205	D-6
D206	D-7
D208	E-2
D303	D-7
D304	D-8
Q101	B-2
Q103	B-2
Q105	B-5
Q107	B-4
Q109	B-6
Q111	B-5
Q303	C-7

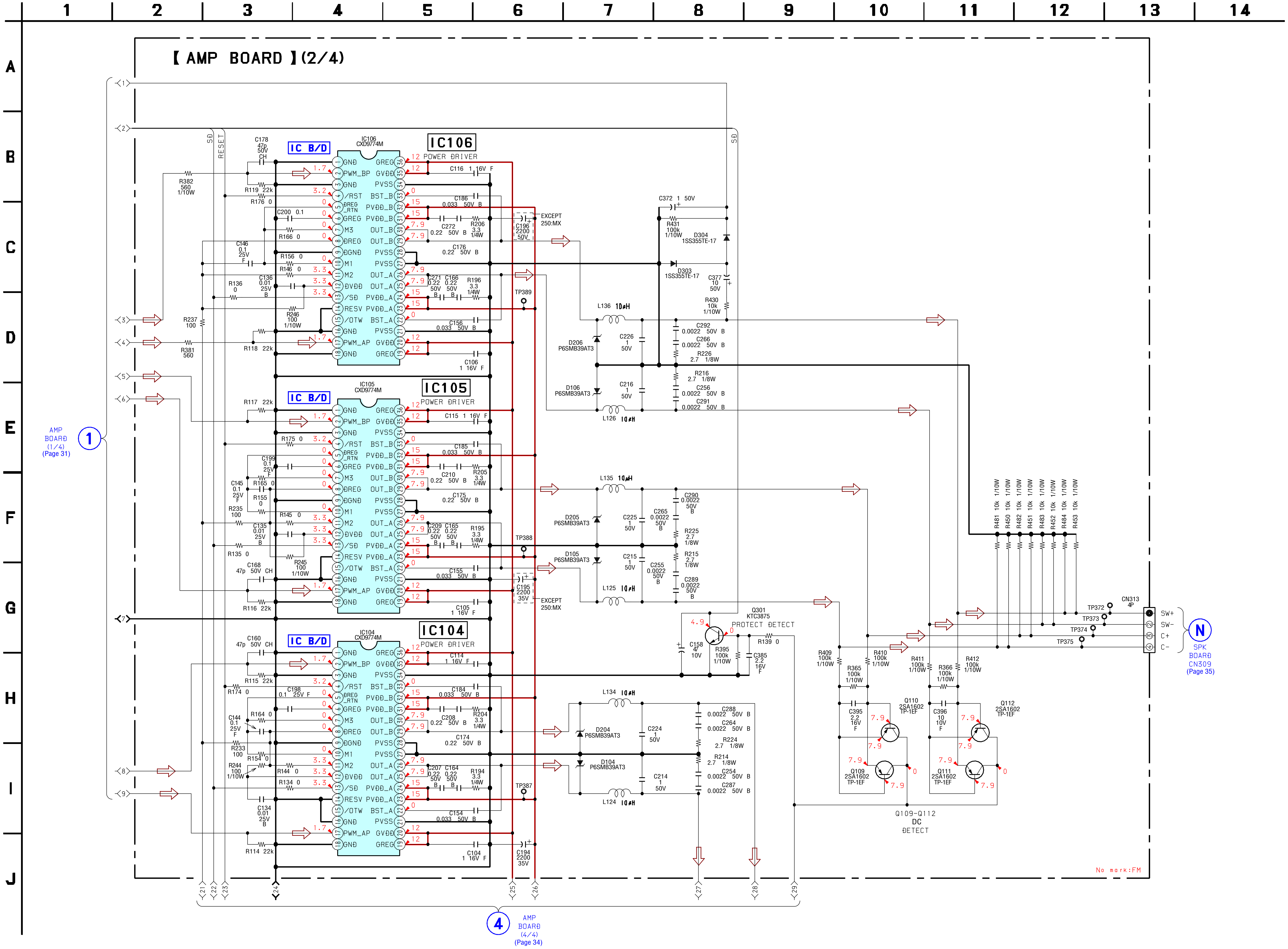
2-25. SCHEMATIC DIAGRAM — AMP SECTION (1/4) —

• See page 43 for IC Block diagrams.


1 2 3 4 5 6 7 8 9 10 11 12
A B C D E F G H I J
【 AMP BOARD 】(1/4)
IC110
STREAM PROCESSOR
IC110 CXD9788AR
IC B/D
IC109
STREAM PROCESSOR
IC109 CXD9788AR
IC B/D
CN301 17P
CN302 9P
J
MAIN BOARD (2/2) CN509 (Page 24)
C
DMB07 BOARD (1/8) CN106 (Page 13)
1
AMP BOARD (2/4) (Page 32)
2
AMP BOARD (4/4) (Page 34)
3
AMP BOARD (3/4) (Page 33)
NSP MUTE
SOFT MUTE
PGMUTE
SCDT
SHIFT
LAT3
HP MUTE
HPSW
OVF2
OVF
SD
RESET
LAT2
LAT1
INIT
LRCK
BCK
DATA3
DATA2
DATA1
SCK
SL303
SL302
No mark:FM

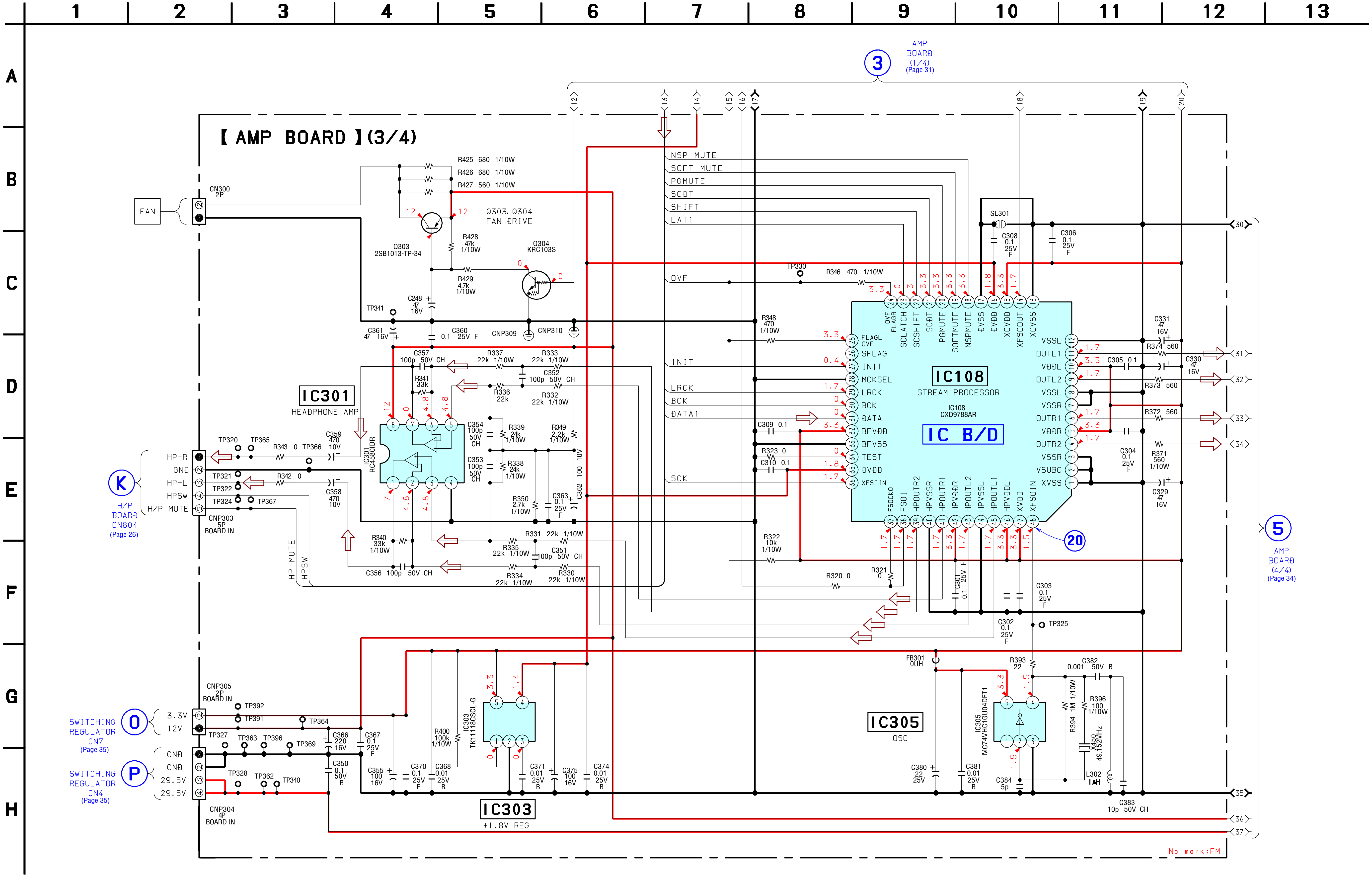
2-26. SCHEMATIC DIAGRAM — AMP SECTION (2/4) —

• See page 44 for IC Block diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
【 AMP BOARD 】(2/4)
IC B/D
IC106
CXD9774M
POWER DRIVER
IC105
CXD9774M
POWER DRIVER
IC104
CXD9774M
POWER DRIVER
GND PWM_BP /RST BREG_RTN GREG M3 BREG DGND M1 M2 DVDD /SD RESV /OTW GND PWM_AP GND
GREG GVDD PVSS BST_B PVDD_B OUT_B PVSS OUT_A PVDD_A BST_A PVSS GVDD GREG
L136 10μH
L126 10μH
L135 10μH
L125 10μH
L134 10μH
L124 10μH
D206 P6SMB39AT3
D106 P6SMB39AT3
D205 P6SMB39AT3
D105 P6SMB39AT3
D204 P6SMB39AT3
D104 P6SMB39AT3
D304 1SS355TE-17
D303 1SS355TE-17
Q301 KTC3875 PROTECT DETECT
Q109–Q112 DC DETECT
Q109 2SA1602 TP-1EF
Q110 2SA1602 TP-1EF
Q111 2SA1602 TP-1EF
Q112 2SA1602 TP-1EF
EXCEPT 250:MX
TP389
TP388
TP387
TP372
TP373
TP374
TP375
CN313 4P
SW+
SW-
C+
C-
N
SPK BOARD CN309 (Page 35)
1
AMP BOARD (1/4) (Page 31)
4
AMP BOARD (4/4) (Page 34)
No mark:FM
RESET
SD

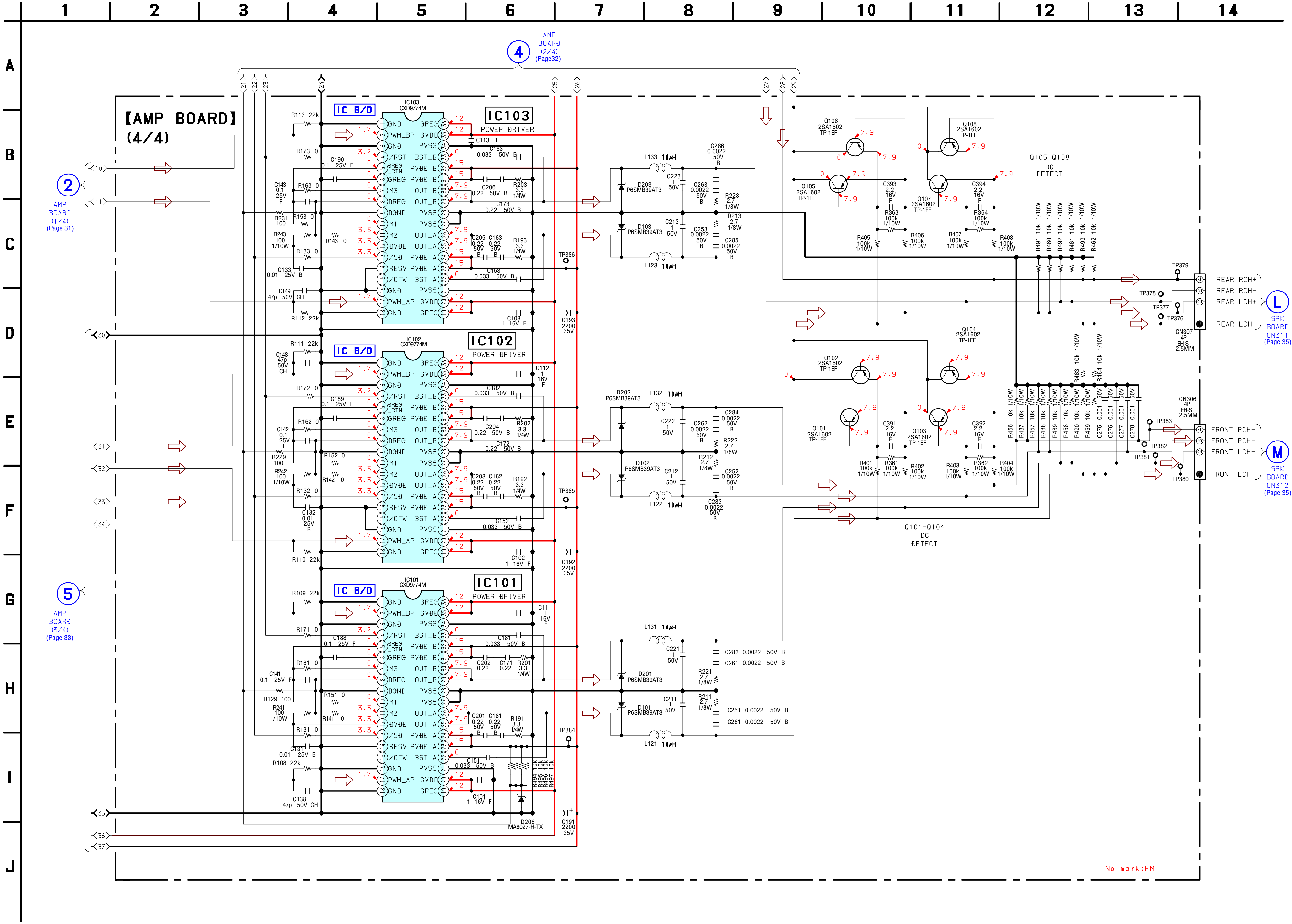
2-27. SCHEMATIC DIAGRAM — AMP SECTION (3/4) —

• See page 38 for Waveforms. • See page 43 for IC Block diagrams.


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
【 AMP BOARD 】(3/4)
3
AMP BOARD (1/4) (Page 31)
5
AMP BOARD (4/4) (Page 34)
K
H/P BOARD CN804 (Page 26)
O
SWITCHING REGULATOR CN7 (Page 35)
P
SWITCHING REGULATOR CN4 (Page 35)
FAN
CN300 2P
CNP303 5P BOARD IN
CNP305 2P BOARD IN
CNP304 4P BOARD IN
HP-R
GND
HP-L
HPSW
H/P MUTE
3.3V
12V
GND
GND
29.5V
29.5V
R425 680 1/10W
R426 680 1/10W
R427 560 1/10W
Q303, Q304 FAN DRIVE
Q303 2SB1013-TP-34
Q304 KRC103S
R428 47k 1/10W
R429 4.7k 1/10W
C248 47 16V
TP341
C361 47 16V
C360 0.1 25V F
CNP309
CNP310
IC301
HEADPHONE AMP
IC301 RC4580IDR
C357 100p 50V CH
R337 22k 1/10W
R333 22k 1/10W
C352 100p 50V CH
R341 33k
R336 22k
R332 22k 1/10W
C359 470 10V
C354 100p 50V CH
R339 24k 1/10W
R349 2.2k 1/10W
C353 100p 50V CH
R338 24k 1/10W
C358 470 10V
R350 2.7k 1/10W
C363 0.1 25V F
C362 100 10V
R340 33k 1/10W
R335 22k 1/10W
R331 22k 1/10W
C351 100p 50V CH
C356 100p 50V CH
R334 22k 1/10W
R330 22k 1/10W
R343 0
R342 0
TP320
TP365
TP366
TP321
TP322
TP324
TP367
HP MUTE
HPSW
NSP MUTE
SOFT MUTE
PGMUTE
SCDT
SHIFT
LAT1
OVF
INIT
LRCK
BCK
DATA1
SCK
TP330
R346 470 1/10W
R348 470 1/10W
C309 0.1
R323 0
C310 0.1
R322 10k 1/10W
R320 0
R321 0
SL301
C308 0.1 25V F
C306 0.1 25V F
C331 47 16V
R374 560
C330 47 16V
C305 0.1
R373 560
R372 560
C304 0.1 25V F
R371 560 1/10W
C329 47 16V
IC108
STREAM PROCESSOR
IC108 CXD9788AR
IC B/D
20
FLAGL OVF
SFLAG
INIT
MCKSEL
LRCK
BCK
DATA
BFVDD
BFVSS
TEST
DVDD
XFSIIN
OVF FLAGR
SCLATCH
SCSHIFT
SCDT
PGMUTE
SOFTMUTE
NSPMUTE
DVSS
DVDD
XOVDD
XFSOOUT
XOVSS
VSSL
OUTL1
VDDL
OUTL2
VSSL
VSSR
OUTR1
VDDR
OUTR2
VSSR
VSUBC
XVSS
FSOCKO
FSO1
HPOUTR2
HPVSSR
HPOUTR1
HPVDDR
HPOUTL2
HPVSSL
HPOUTL1
HPVDDL
XVDD
XFSOIN
C301 0.1 25V F
C303 0.1 25V F
C302 0.1 25V F
TP325
FB301 0UH
R393 22
C382 0.001 50V B
IC305
OSC
IC305 MC74VHC1GU04DFT1
R394 1M 1/10W
R396 100 1/10W
X450 49.152MHz
L302 1uH
C380 22 25V
C381 0.01 25V B
C384 5p
C383 10p 50V CH
TP392
TP391
TP364
TP327
TP363
TP396
TP369
TP328
TP362
TP340
C366 220 16V
C367 0.1 25V F
C350 0.1 50V B
C355 100 16V
C370 0.1 25V F
C368 0.01 25V B
R400 100k 1/10W
IC303 TK11118CSCL-G
C371 0.01 25V B
C375 100 16V
C374 0.01 25V B
IC303
+1.8V REG
No mark:FM

2-28. SCHEMATIC DIAGRAM — AMP SECTION (4/4) —

• See page 44 for IC Block diagrams.

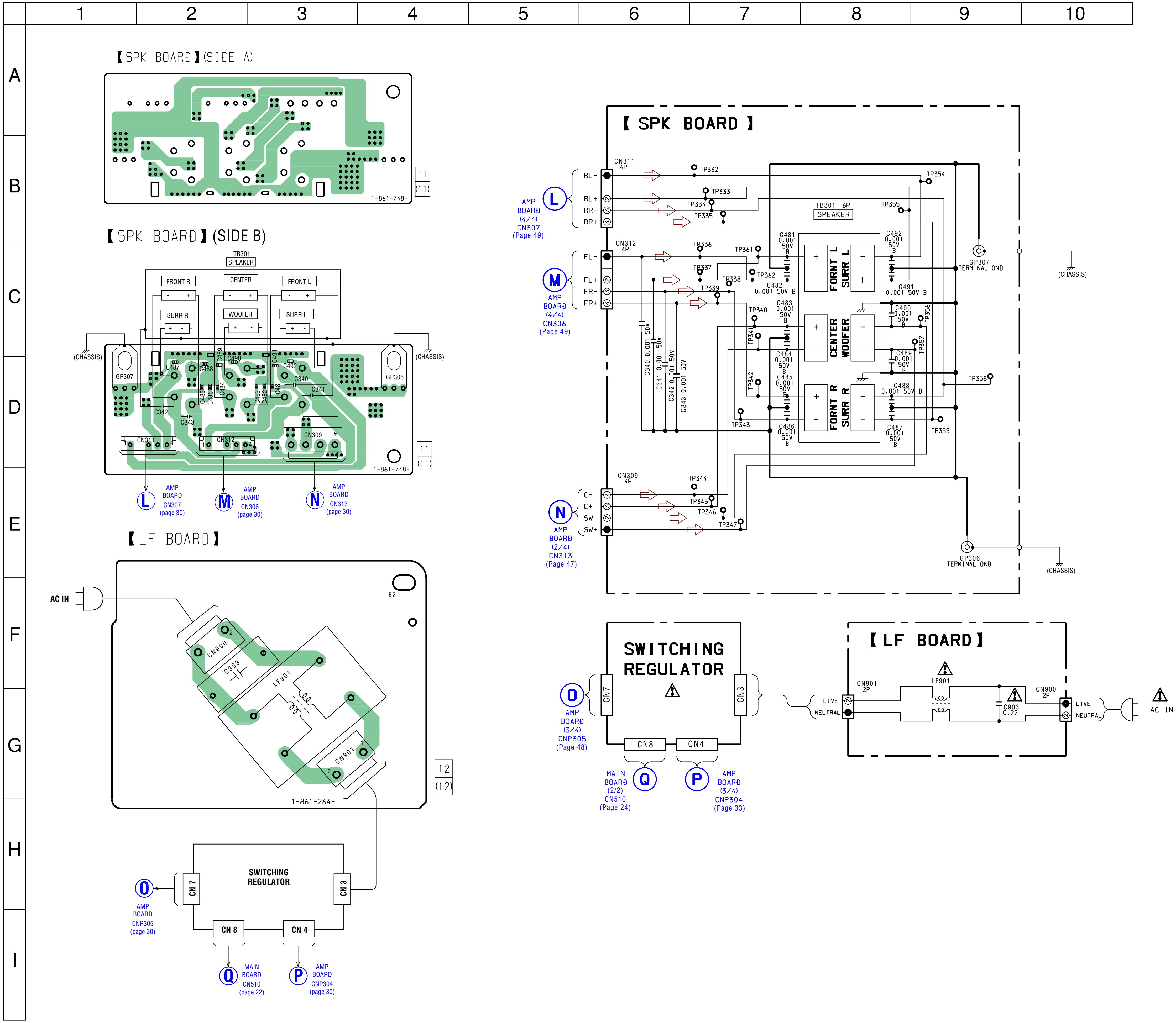


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
【AMP BOARD】
(4/4)
IC B/D
IC103
CXD9774M
POWER DRIVER
IC102
CXD9774M
POWER DRIVER
IC101
CXD9774M
POWER DRIVER
GND
PWM_BP
/RST
BREG_RTN
GREG
M3
DREG
DGND
M1
M2
DVDD
/SD
RESV
/OTW
PWM_AP
GVDD
PVSS
BST_B
PVDD_B
OUT_B
OUT_A
PVDD_A
BST_A
2 AMP BOARD (1/4) (Page 31)
4 AMP BOARD (2/4) (Page32)
5 AMP BOARD (3/4) (Page 33)
L SPK BOARD CN311 (Page 35)
M SPK BOARD CN312 (Page 35)
Q105–Q108 DC DETECT
Q101–Q104 DC DETECT
Q101 2SA1602 TP-1EF
Q102 2SA1602 TP-1EF
Q103 2SA1602 TP-1EF
Q104 2SA1602 TP-1EF
Q105 2SA1602 TP-1EF
Q106 2SA1602 TP-1EF
Q107 2SA1602 TP-1EF
Q108 2SA1602 TP-1EF
D101 P6SMB39AT3
D102 P6SMB39AT3
D103 P6SMB39AT3
D201 P6SMB39AT3
D202 P6SMB39AT3
D203 P6SMB39AT3
D208 MA8027-H-TX
L121 10μH
L122 10μH
L123 10μH
L131 10μH
L132 10μH
L133 10μH
C191 2200 35V
C192 2200 35V
C193 2200 35V
CN307 4P EH-S 2.5MM
CN306 4P EH-S 2.5MM
REAR RCH+
REAR RCH−
REAR LCH+
REAR LCH−
FRONT RCH+
FRONT RCH−
FRONT LCH+
FRONT LCH−
TP376 TP377 TP378 TP379 TP380 TP381 TP382 TP383 TP384 TP385 TP386
No mark:FM

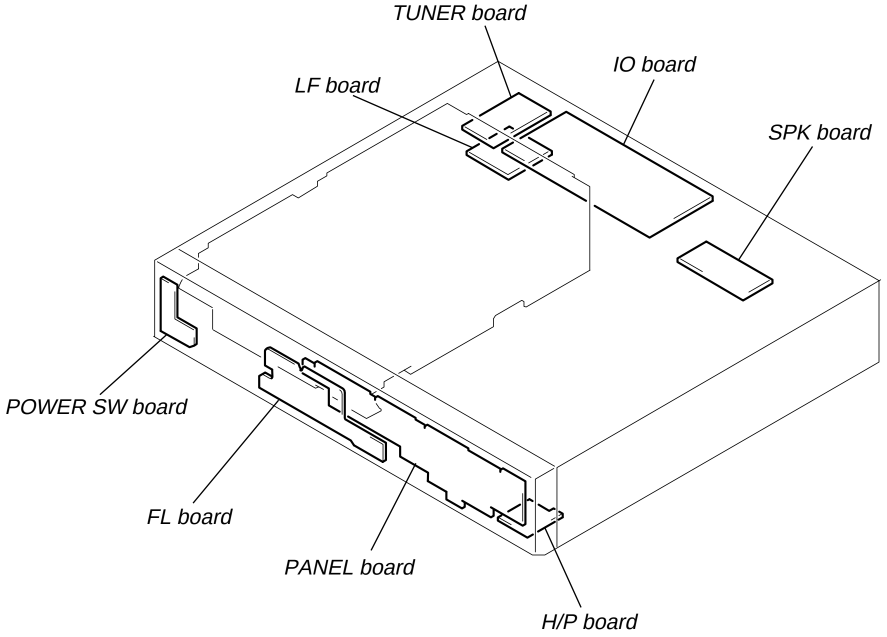
2-29. PRINTED WIRING BOARD — SPK/LF SECTION —

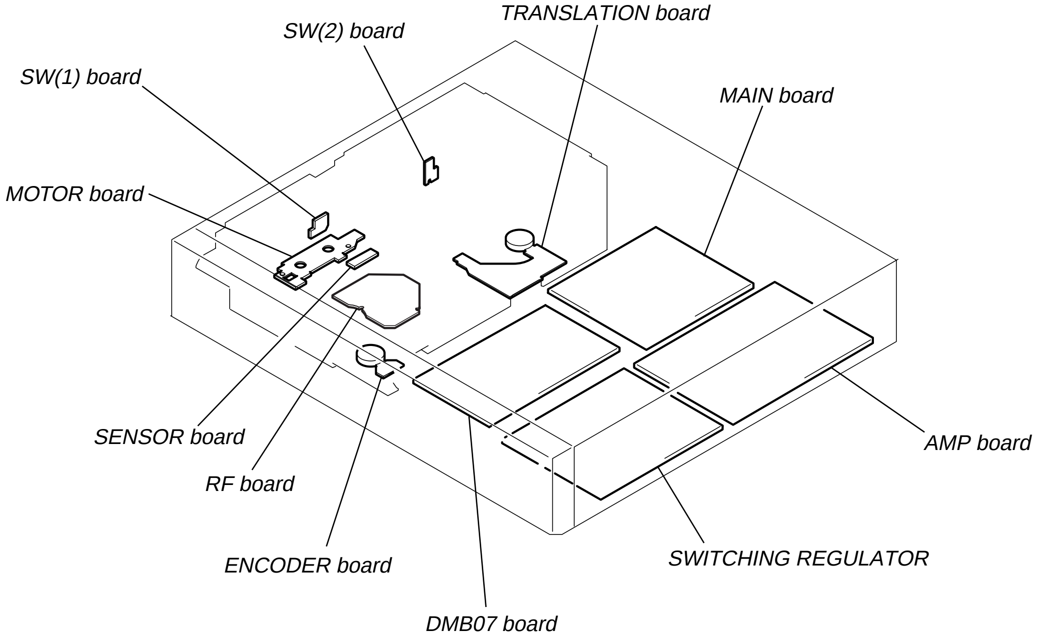
:Uses unleaded solder.
• See page 36 for Circuit Boards Location.

2-30. SCHEMATIC DIAGRAM — SPK/LF SECTION —


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
【SPK BOARD】(SIDE A)
1-861-748-
11
(11)
【SPK BOARD】(SIDE B)
TB301
SPEAKER
FRONT R
CENTER
FRONT L
SURR R
WOOFER
SURR L
(CHASSIS)
GP307
GP306
C487
C488
C489
C490
C491
C492
C340
C341
C342
C343
CN311
CN312
CN309
AMP BOARD CN307 (page 30)
AMP BOARD CN306 (page 30)
AMP BOARD CN313 (page 30)
L
M
N
【LF BOARD】
AC IN
B2
CN900
C903
LF901
CN901
1-861-264-
12
(12)
SWITCHING REGULATOR
CN 7
CN 3
CN 8
CN 4
O
AMP BOARD CNP305 (page 30)
Q
MAIN BOARD CN510 (page 22)
P
AMP BOARD CNP304 (page 30)
【SPK BOARD】
CN311 4P
RL-
RL+
RR-
RR+
AMP BOARD (4/4) CN307 (Page 49)
TP332
TP333
TP334
TP335
TP354
TP355
TB301 6P SPEAKER
C481 0.001 50V B
C492 0.001 50V B
FORNT L
SURR L
CENTER
WOOFER
FORNT R
SURR R
GP307 TERMINAL GND
CN312 4P
FL-
FL+
FR-
FR+
AMP BOARD (4/4) CN306 (Page 49)
TP336
TP337
TP338
TP339
TP361
TP362
C482 0.001 50V B
C491 0.001 50V B
TP340
TP341
TP342
TP343
C483 0.001 50V B
C490 0.001 50V B
TP356
TP357
C484 0.001 50V B
C489 0.001 50V B
C485 0.001 50V B
C488 0.001 50V B
TP358
C486 0.001 50V B
C487 0.001 50V B
TP359
C340 0.001 50V
C341 0.001 50V
C342 0.001 50V
C343 0.001 50V
CN309 4P
C-
C+
SW-
SW+
AMP BOARD (2/4) CN313 (Page 47)
TP344
TP345
TP346
TP347
GP306 TERMINAL GND
SWITCHING REGULATOR
CN7
CN3
CN8
CN4
AMP BOARD (3/4) CNP305 (Page 48)
MAIN BOARD (2/2) CN510 (Page 24)
AMP BOARD (3/4) CNP304 (Page 33)
【LF BOARD】
CN901 2P
LF901
CN900 2P
C903 0.22
LIVE
NEUTRAL
AC IN

- **Circuit Boards Location**


TUNER board
IO board
LF board
SPK board
POWER SW board
FL board
PANEL board
H/P board


TRANSLATION board
SW(2) board
SW(1) board
MAIN board
MOTOR board
SENSOR board
RF board
ENCODER board
DMB07 board
SWITCHING REGULATOR
AMP board

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Schematic Diagrams.
Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $^1/_4$ W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ━━ : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  RF board, DMB07 board
  no mark : DVD STOP
  Other board
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO
  ➩ : CD PLAY
  ⇛ : DVD PLAY
  ▷ : TUNER
  ⇨» : VIDEO
  ⊳ : Y
  ⊳» : CHROMA
  ⊳⊳ : COMPONENT VIDEO
  ⊳ : R, G, B
- Abbreviation
  AUS : Australian model.
  CND : Canadian model.
  E41 : 230 V AC Area in E model.
  EA : Saudi Arabia model.
  KR : Korea model.
  MX : Mexican model.
  TW : Taiwan model.

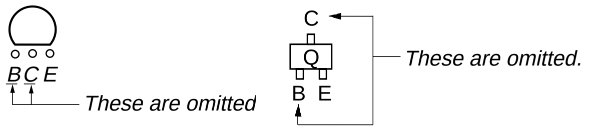
For Printed Wiring Boards.
Note:

- o—— : parts extracted from the component side.
- ○ : Through hole.
- 🟩 : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (SIDE A)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE B)	Parts on the parts face side seen from the parts face are indicated.

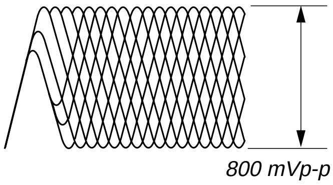
- Indication of transistor.


B C E
These are omitted
C
Q
B E
These are omitted.

- **Waveforms**

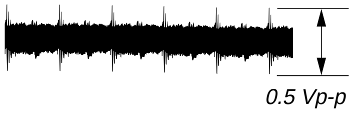
– RF Board –

① IC001 ① (DVDRFP)



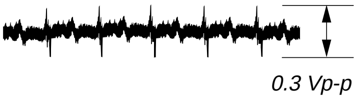
200 mV/DIV, 100 ns/DIV

② IC001 ㊴ (TE)



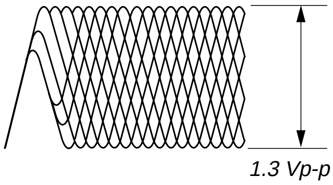
500 mV/DIV, 1 ms/DIV

③ IC001 ㊵ (FE)



100 mV/DIV, 1 ms/DIV

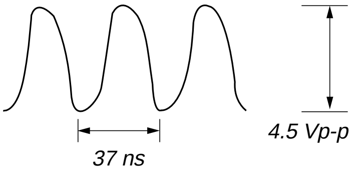
④ IC001 (57) (RFAC)



500 mV/DIV, 100 ns/DIV

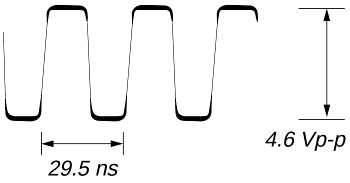
– DMB07 Board –

⑤ IC906 ⑧ (XTO)



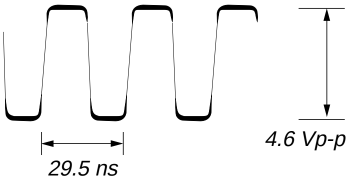
1 V/DIV, 10 ns/DIV

⑦ IC906 ⑩ (SO2)



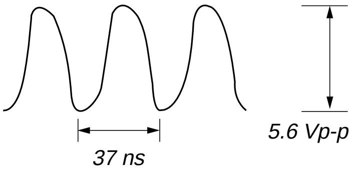
1 V/DIV, 10 ns/DIV

⑧ IC906 ⑬ (SO3)



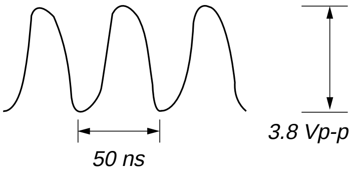
1 V/DIV, 10 ns/DIV

⑨ IC906 ③ (MO1)



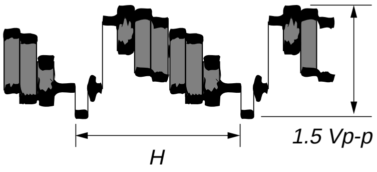
1 V/DIV, 10 ns/DIV

⑩ IC901 ㊵ (XTAL)



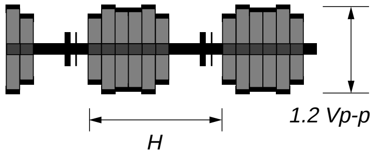
1 V/DIV, 20 ns/DIV

⑪ IC207 (131) (VDAC_0)



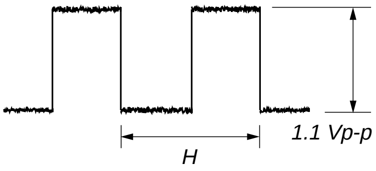
500 mV/DIV, 20 μs/DIV

⑫ IC207 (128) (VDAC_1)



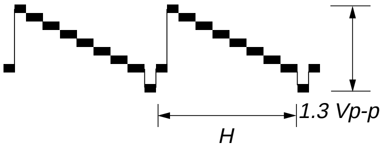
500 mV/DIV, 20 μs/DIV

**⑬ IC207 (125) (VDAC_2)
(AEP,UK)**



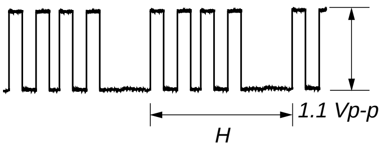
500 mV/DIV, 20 μs/DIV

**⑬ IC207 (125) (VDAC_2)
(EXCEPT AEP,UK)**



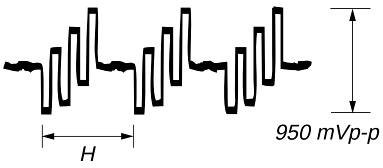
500 mV/DIV, 20 μs/DIV

**⑭ IC207 (122) (VDAC_3)
(AEP,UK)**



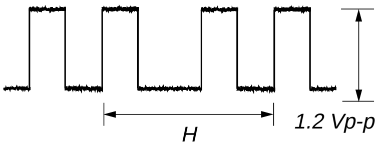
500 mV/DIV, 20 μs/DIV

**⑭ IC207 (122) (VDAC_3)
(EXCEPT AEP,UK)**



200 mV/DIV, 20 μs/DIV

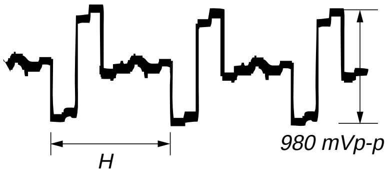
**⑮ IC207 (119) (VDAC_4)
(AEP,UK)**



500 mV/DIV, 20 μs/DIV

– DMB07 Board –

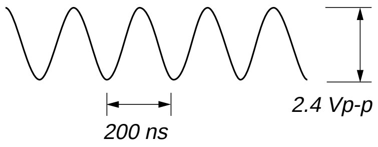
**⑮ IC207 (119) (VDAC_4)
(EXCEPT AEP,UK)**



200 mV/DIV, 20 µs/DIV

– MAIN Board –

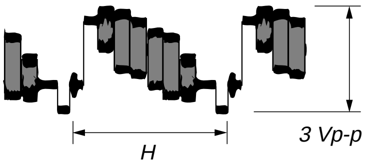
⑯ IC509 ⑭ (X1)



1 V/DIV, 100 ns/DIV

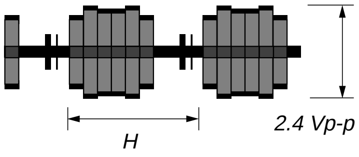
– IO Board –

⑰ IC201 ㉓ (CVBS OUT)



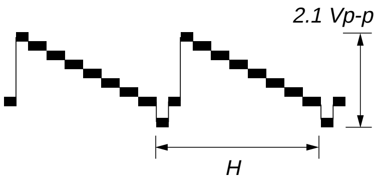
1 V/DIV, 20 µs/DIV

⑱ IC201 ㉖ (COUT)



1 V/DIV, 20 µs/DIV

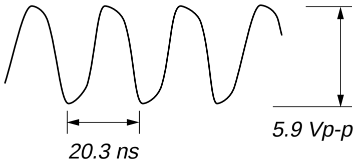
⑲ IC201 ㉑ (YOUT)



1 V/DIV, 20 µs/DIV

– AMP Board –

⑳ IC108 ㊽ (XFSOIN)

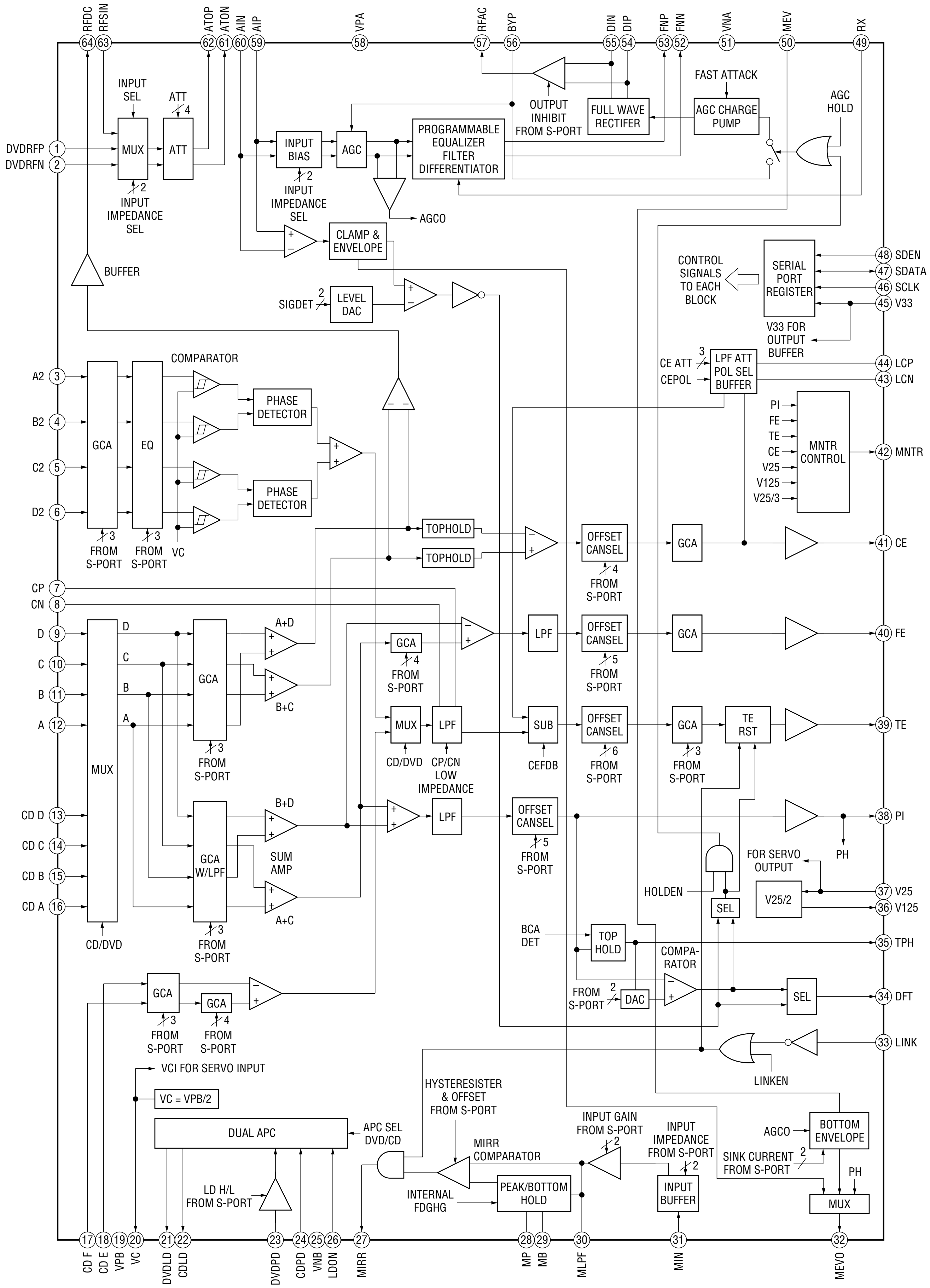


1 V/DIV, 10 ns/DIV

- **IC Block Diagrams**

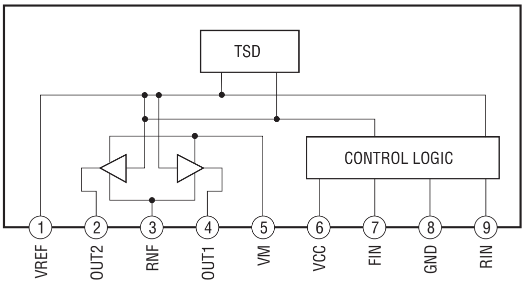
– RF Board –

IC001 SP3723CAF0PM


RFDC 64
RFSIN 63
ATOP 62
ATON 61
AIN 60
AIP 59
VPA 58
RFAC 57
BYP 56
DIN 55
DIP 54
FNP 53
FNN 52
VNA 51
MEV 50
RX 49
INPUT SEL
ATT
4
MUX
ATT
2
INPUT IMPEDANCE SEL
DVDRFP 1
DVDRFN 2
INPUT BIAS
2
INPUT IMPEDANCE SEL
AGC
PROGRAMMABLE EQUALIZER FILTER DIFFERENTIATOR
AGCO
OUTPUT INHIBIT FROM S-PORT
FULL WAVE RECTIFER
FAST ATTACK
AGC CHARGE PUMP
AGC HOLD
CLAMP & ENVELOPE
BUFFER
SIGDET
2
LEVEL DAC
CONTROL SIGNALS TO EACH BLOCK
SERIAL PORT REGISTER
48 SDEN
47 SDATA
46 SCLK
45 V33
V33 FOR OUTPUT BUFFER
CE ATT
3
CEPOL
LPF ATT POL SEL BUFFER
44 LCP
43 LCN
PI
FE
TE
CE
V25
V125
V25/3
MNTR CONTROL
42 MNTR
COMPARATOR
A2 3
B2 4
C2 5
D2 6
GCA
EQ
PHASE DETECTOR
PHASE DETECTOR
3
FROM S-PORT
3
FROM S-PORT
VC
TOPHOLD
TOPHOLD
OFFSET CANSEL
4
FROM S-PORT
GCA
41 CE
CP 7
CN 8
D 9
C 10
B 11
A 12
MUX
D
C
B
A
GCA
3
FROM S-PORT
A+D
B+C
GCA
4
FROM S-PORT
LPF
OFFSET CANSEL
5
FROM S-PORT
GCA
40 FE
MUX
CD/DVD
LPF
CP/CN LOW IMPEDANCE
SUB
CEFDB
OFFSET CANSEL
6
FROM S-PORT
GCA
3
FROM S-PORT
TE RST
39 TE
CD D 13
CD C 14
CD B 15
CD A 16
CD/DVD
B+D
GCA W/LPF
3
FROM S-PORT
SUM AMP
A+C
LPF
OFFSET CANSEL
5
FROM S-PORT
38 PI
PH
FOR SERVO OUTPUT
HOLDEN
SEL
V25/2
37 V25
36 V125
BCA DET
TOP HOLD
COMPA-RATOR
35 TPH
FROM S-PORT
2
DAC
SEL
34 DFT
GCA
GCA
3
FROM S-PORT
4
FROM S-PORT
33 LINK
LINKEN
VCI FOR SERVO INPUT
VC = VPB/2
DUAL APC
APC SEL DVD/CD
HYSTERESISTER & OFFSET FROM S-PORT
MIRR COMPARATOR
INPUT GAIN FROM S-PORT
2
INPUT IMPEDANCE FROM S-PORT
2
AGCO
BOTTOM ENVELOPE
SINK CURRENT FROM S-PORT
2
PH
MUX
LD H/L FROM S-PORT
INTERNAL FDGHG
PEAK/BOTTOM HOLD
INPUT BUFFER
17 CD F
18 CD E
19 VPB
20 VC
21 DVDLD
22 CDLD
23 DVDPD
24 CDPD
25 VNB
26 LDON
27 MIRR
28 MP
29 MB
30 MLPF
31 MIN
32 MEVO

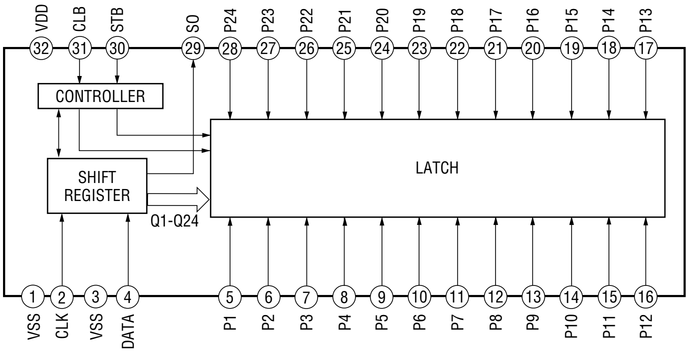
– TRANSLATION Board –

IC701, 711 BA6956AN


TSD
CONTROL LOGIC
1 VREF
2 OUT2
3 RNF
4 OUT1
5 VM
6 VCC
7 FIN
8 GND
9 RIN

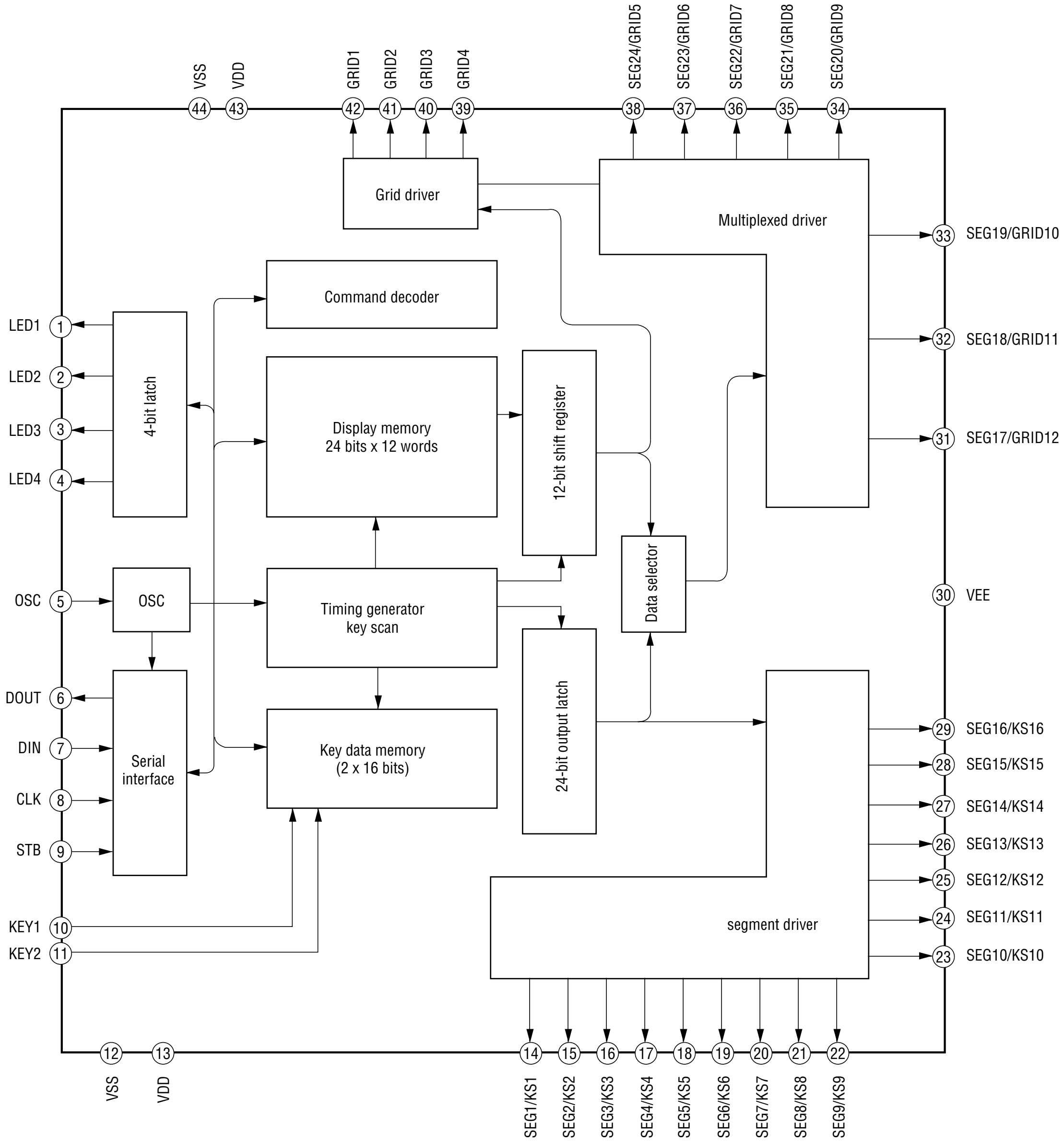
– PANEL Board –

IC802 BU2152FS


32 VDD
31 CLB
30 STB
29 SO
28 P24
27 P23
26 P22
25 P21
24 P20
23 P19
22 P18
21 P17
20 P16
19 P15
18 P14
17 P13
CONTROLLER
SHIFT REGISTER
LATCH
Q1-Q24
1 VSS
2 CLK
3 VSS
4 DATA
5 P1
6 P2
7 P3
8 P4
9 P5
10 P6
11 P7
12 P8
13 P9
14 P10
15 P11
16 P12

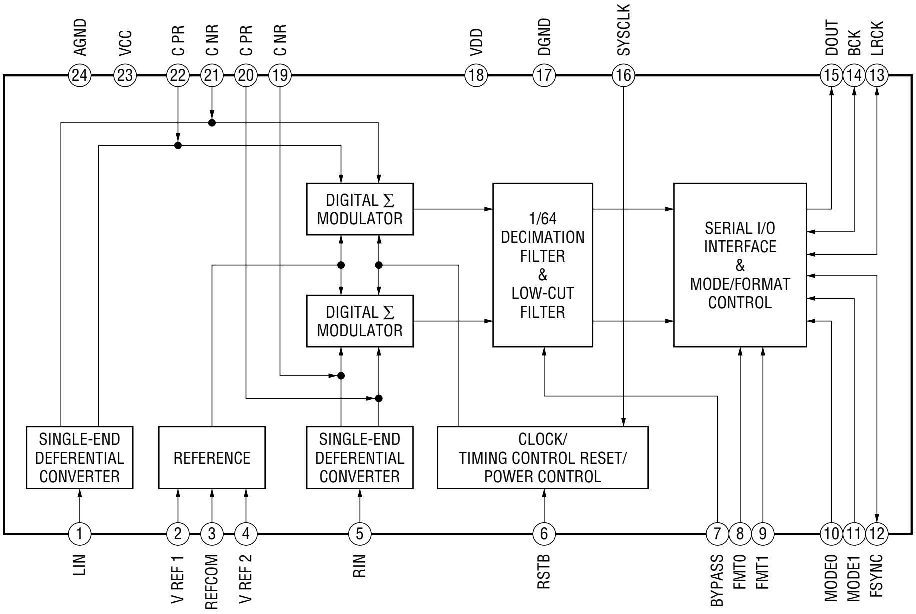
– FL Board –

IC803 PT6315

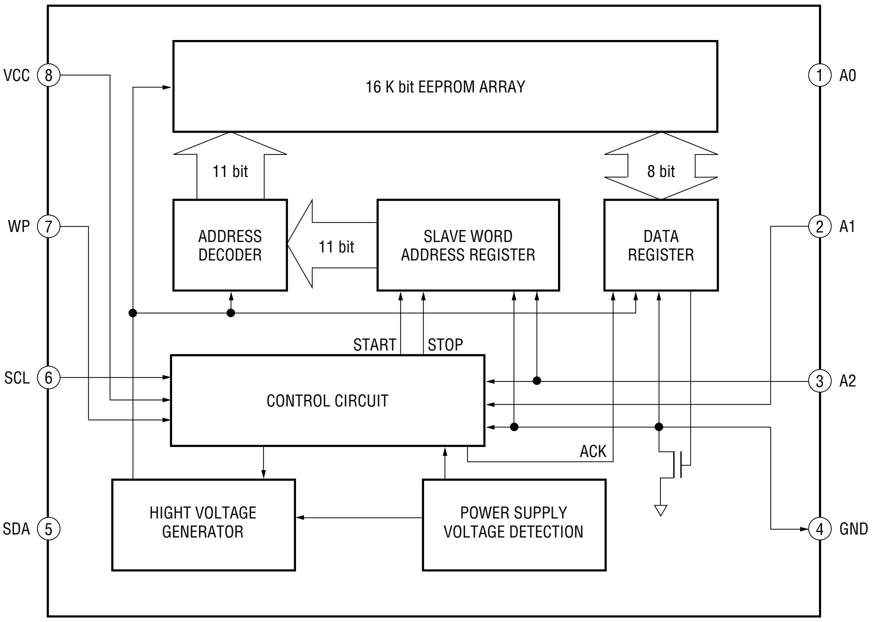

44 VSS
43 VDD
42 GRID1
41 GRID2
40 GRID3
39 GRID4
38 SEG24/GRID5
37 SEG23/GRID6
36 SEG22/GRID7
35 SEG21/GRID8
34 SEG20/GRID9
Grid driver
Multiplexed driver
33 SEG19/GRID10
32 SEG18/GRID11
31 SEG17/GRID12
30 VEE
Command decoder
Display memory
24 bits x 12 words
12-bit shift register
4-bit latch
Data selector
OSC
Timing generator
key scan
24-bit output latch
Serial interface
Key data memory
(2 x 16 bits)
segment driver
LED1 1
LED2 2
LED3 3
LED4 4
OSC 5
DOUT 6
DIN 7
CLK 8
STB 9
KEY1 10
KEY2 11
12 VSS
13 VDD
29 SEG16/KS16
28 SEG15/KS15
27 SEG14/KS14
26 SEG13/KS13
25 SEG12/KS12
24 SEG11/KS11
23 SEG10/KS10
14 SEG1/KS1
15 SEG2/KS2
16 SEG3/KS3
17 SEG4/KS4
18 SEG5/KS5
19 SEG6/KS6
20 SEG7/KS7
21 SEG8/KS8
22 SEG9/KS9

– DMB07 Board –

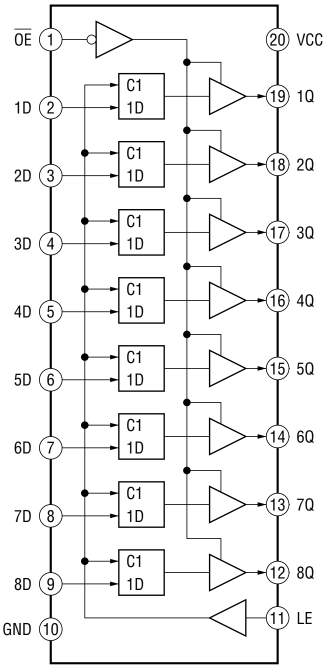
IC352 PCM1800E/2K


AGND
VCC
C PR
C NR
C PR
C NR
VDD
DGND
SYSCLK
DOUT
BCK
LRCK
24
23
22
21
20
19
18
17
16
15
14
13
DIGITAL Σ MODULATOR
DIGITAL Σ MODULATOR
1/64 DECIMATION FILTER & LOW-CUT FILTER
SERIAL I/O INTERFACE & MODE/FORMAT CONTROL
SINGLE-END DEFERENTIAL CONVERTER
REFERENCE
SINGLE-END DEFERENTIAL CONVERTER
CLOCK/ TIMING CONTROL RESET/ POWER CONTROL
1
2
3
4
5
6
7
8
9
10
11
12
LIN
V REF 1
REFCOM
V REF 2
RIN
RSTB
BYPASS
FMT0
FMT1
MODE0
MODE1
FSYNC

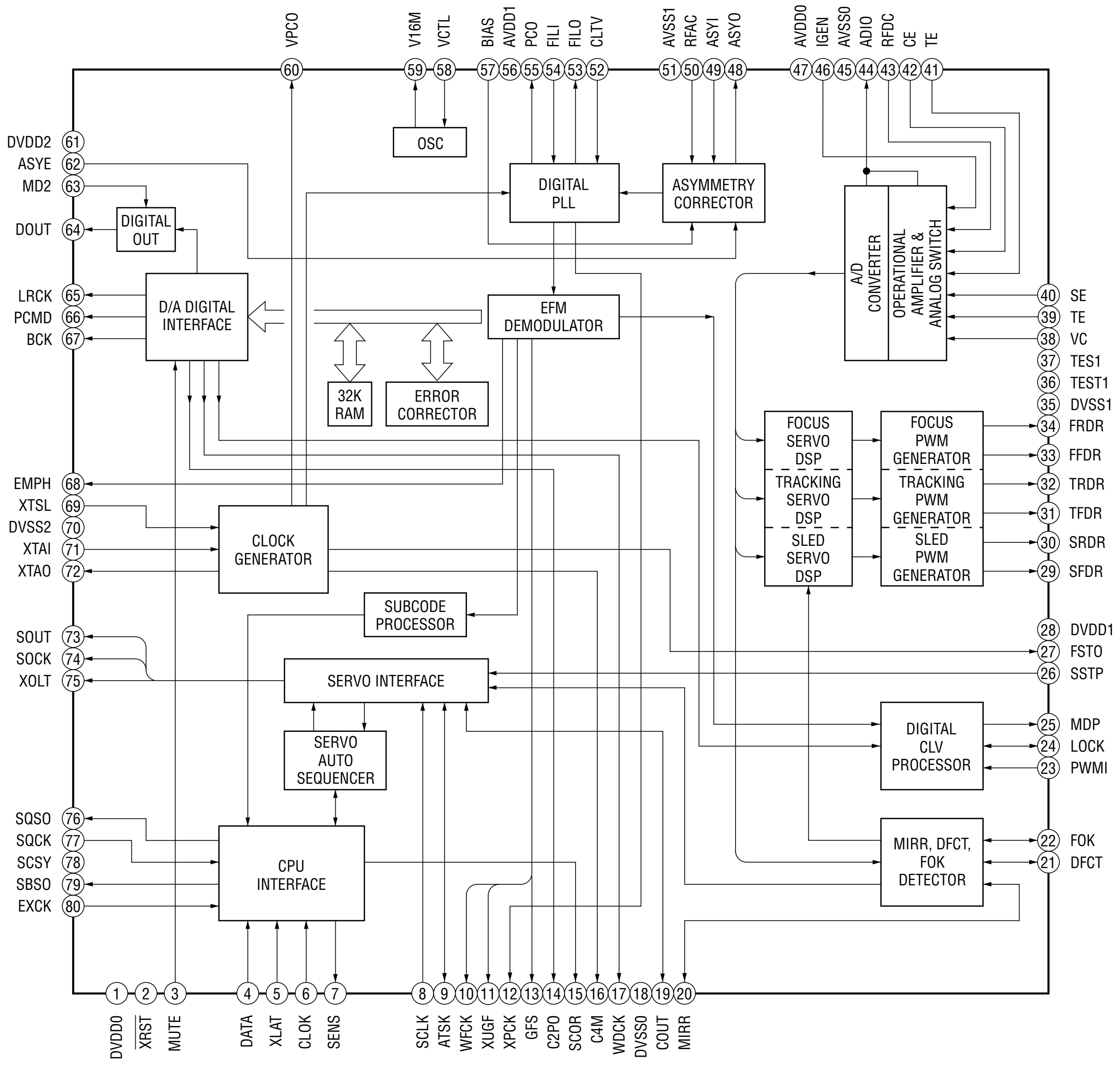
IC903 BR24L16F-WE2


VCC 8
WP 7
SCL 6
SDA 5
1 A0
2 A1
3 A2
4 GND
16 K bit EEPROM ARRAY
11 bit
8 bit
ADDRESS DECODER
11 bit
SLAVE WORD ADDRESS REGISTER
DATA REGISTER
START
STOP
CONTROL CIRCUIT
ACK
HIGHT VOLTAGE GENERATOR
POWER SUPPLY VOLTAGE DETECTION

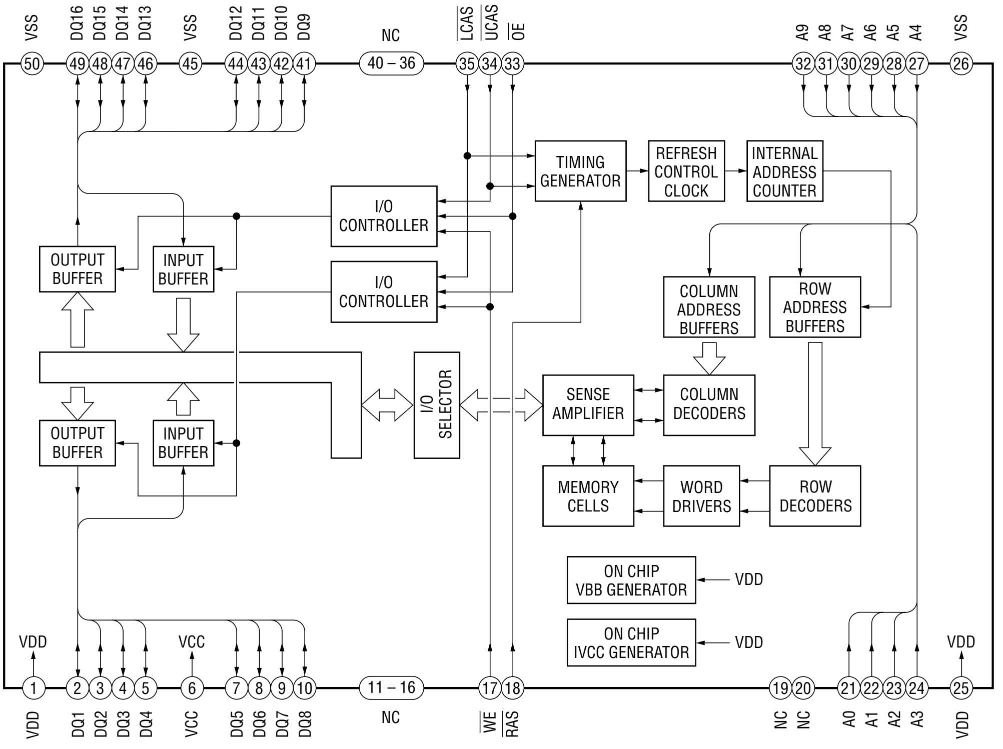
IC231-233, 256, 258, 259
SN74LV573APWR


$\overline{OE}$ 1
1D 2
2D 3
3D 4
4D 5
5D 6
6D 7
7D 8
8D 9
GND 10
20 VCC
19 1Q
18 2Q
17 3Q
16 4Q
15 5Q
14 6Q
13 7Q
12 8Q
11 LE
C1
1D

IC509 CXD3068Q

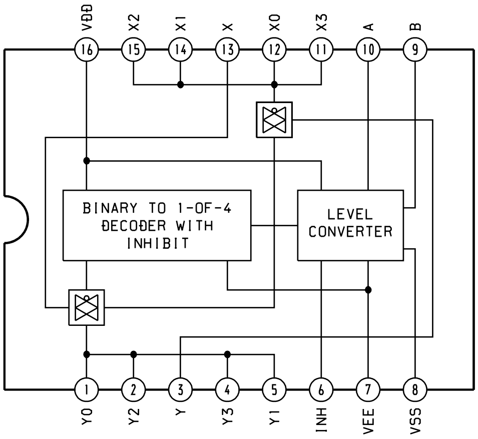

VPCO
V16M
VCTL
BIAS
AVDD1
PCO
FILI
FILO
CLTV
AVSS1
RFAC
ASYI
ASYO
AVDD0
IGEN
AVSS0
ADIO
RFDC
CE
TE
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
OSC
DIGITAL PLL
ASYMMETRY CORRECTOR
A/D CONVERTER
OPERATIONAL AMPLIFIER & ANALOG SWITCH
DVDD2 61
ASYE 62
MD2 63
DOUT 64
DIGITAL OUT
LRCK 65
PCMD 66
BCK 67
D/A DIGITAL INTERFACE
EFM DEMODULATOR
32K RAM
ERROR CORRECTOR
40 SE
39 TE
38 VC
37 TES1
36 TEST1
35 DVSS1
34 FRDR
33 FFDR
32 TRDR
31 TFDR
30 SRDR
29 SFDR
FOCUS SERVO DSP
TRACKING SERVO DSP
SLED SERVO DSP
FOCUS PWM GENERATOR
TRACKING PWM GENERATOR
SLED PWM GENERATOR
EMPH 68
XTSL 69
DVSS2 70
XTAI 71
XTAO 72
CLOCK GENERATOR
SUBCODE PROCESSOR
28 DVDD1
27 FSTO
26 SSTP
SOUT 73
SOCK 74
XOLT 75
SERVO INTERFACE
SERVO AUTO SEQUENCER
DIGITAL CLV PROCESSOR
25 MDP
24 LOCK
23 PWMI
SQSO 76
SQCK 77
SCSY 78
SBSO 79
EXCK 80
CPU INTERFACE
MIRR, DFCT, FOK DETECTOR
22 FOK
21 DFCT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
DVDD0
XRST
MUTE
DATA
XLAT
CLOK
SENS
SCLK
ATSK
WFCK
XUGF
XPCK
GFS
C2PO
SCOR
C4M
WDCK
DVSS0
COUT
MIRR

IC706 M51V18165M-60TS-KR1

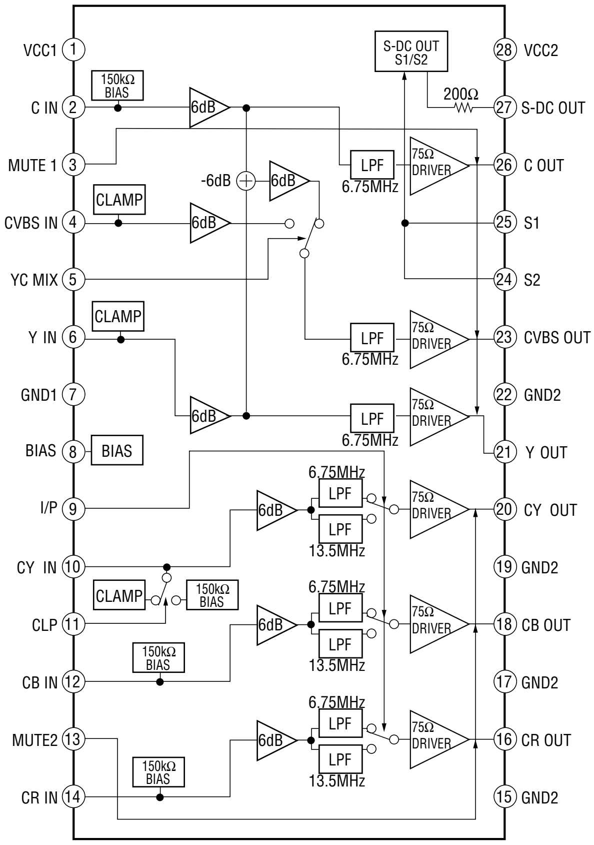

VSS
DQ16
DQ15
DQ14
DQ13
VSS
DQ12
DQ11
DQ10
DQ9
NC
LCAS
UCAS
OE
A9
A8
A7
A6
A5
A4
VSS
50
49
48
47
46
45
44
43
42
41
40 – 36
35
34
33
32
31
30
29
28
27
26
TIMING GENERATOR
REFRESH CONTROL CLOCK
INTERNAL ADDRESS COUNTER
I/O CONTROLLER
I/O CONTROLLER
OUTPUT BUFFER
INPUT BUFFER
COLUMN ADDRESS BUFFERS
ROW ADDRESS BUFFERS
I/O SELECTOR
SENSE AMPLIFIER
COLUMN DECODERS
OUTPUT BUFFER
INPUT BUFFER
MEMORY CELLS
WORD DRIVERS
ROW DECODERS
ON CHIP VBB GENERATOR
VDD
ON CHIP IVCC GENERATOR
VDD
VDD
VCC
VDD
1
2
3
4
5
6
7
8
9
10
11 – 16
17
18
19
20
21
22
23
24
25
VDD
DQ1
DQ2
DQ3
DQ4
VCC
DQ5
DQ6
DQ7
DQ8
NC
WE
RAS
NC
NC
A0
A1
A2
A3
VDD

– IO Board –

IC200 MC14052BDR2

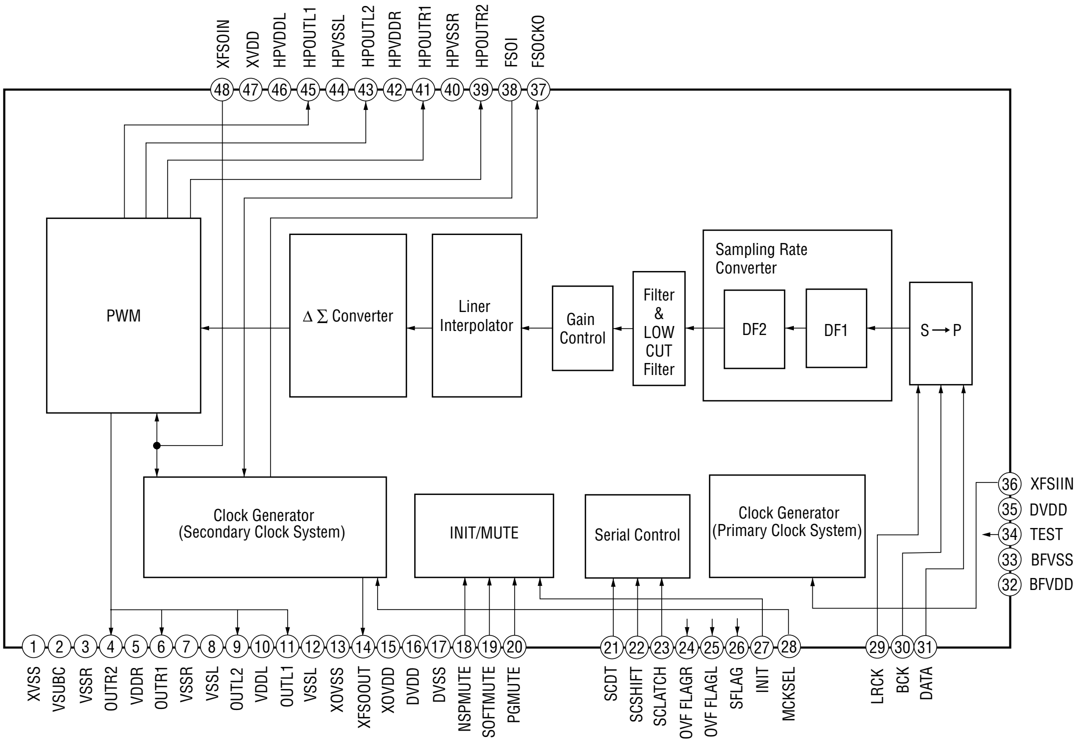

VDD
X2
X1
X
X0
X3
A
B
16
15
14
13
12
11
10
9
BINARY TO 1-OF-4
DECODER WITH
INHIBIT
LEVEL
CONVERTER
1
2
3
4
5
6
7
8
Y0
Y2
Y
Y3
Y1
INH
VEE
VSS

IC201 MM1623BFBE

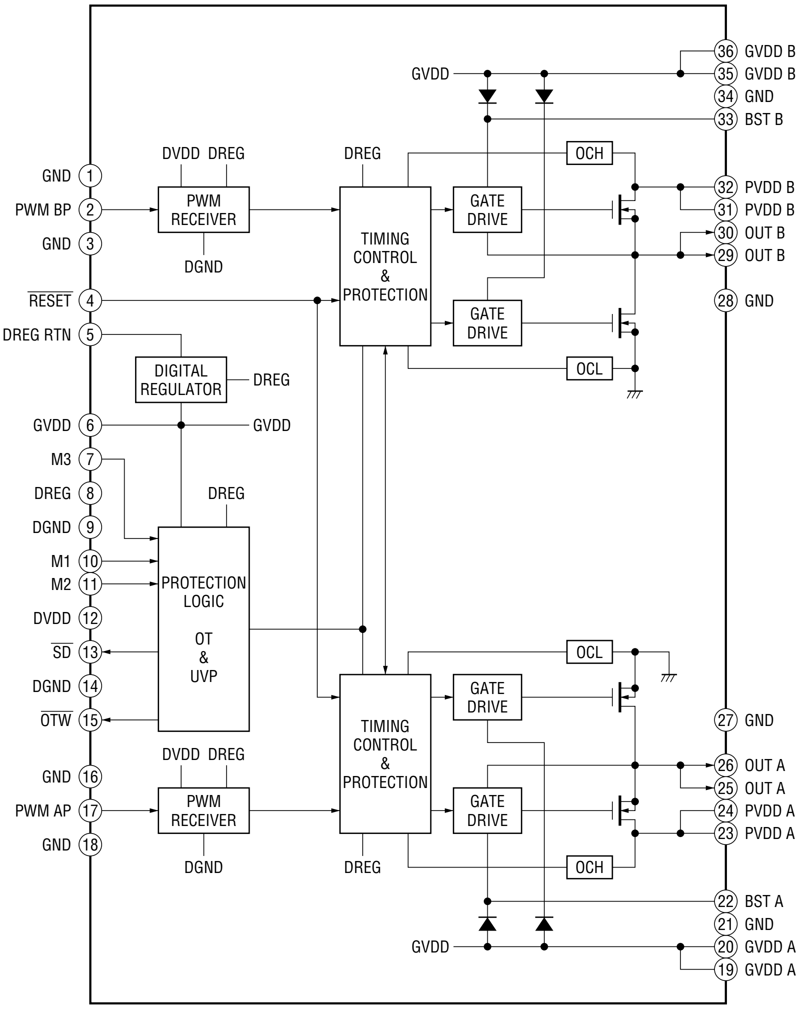

VCC1 1
C IN 2
MUTE 1 3
CVBS IN 4
YC MIX 5
Y IN 6
GND1 7
BIAS 8
I/P 9
CY IN 10
CLP 11
CB IN 12
MUTE2 13
CR IN 14
28 VCC2
27 S-DC OUT
26 C OUT
25 S1
24 S2
23 CVBS OUT
22 GND2
21 Y OUT
20 CY OUT
19 GND2
18 CB OUT
17 GND2
16 CR OUT
15 GND2
S-DC OUT
S1/S2
200Ω
150kΩ
BIAS
6dB
-6dB
CLAMP
BIAS
LPF
6.75MHz
13.5MHz
75Ω
DRIVER

– AMP Board –

IC108, 109, 110 CXD9788AR


XFSOIN
XVDD
HPVDDL
HPOUTL1
HPVSSL
HPOUTL2
HPVDDR
HPOUTR1
HPVSSR
HPOUTR2
FSOI
FSOCKO
48
47
46
45
44
43
42
41
40
39
38
37
PWM
Δ Σ Converter
Liner
Interpolator
Gain
Control
Filter
&
LOW
CUT
Filter
Sampling Rate
Converter
DF2
DF1
S → P
Clock Generator
(Secondary Clock System)
INIT/MUTE
Serial Control
Clock Generator
(Primary Clock System)
36 XFSIIN
35 DVDD
34 TEST
33 BFVSS
32 BFVDD
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
XVSS
VSUBC
VSSR
OUTR2
VDDR
OUTR1
VSSR
VSSL
OUTL2
VDDL
OUTL1
VSSL
XOVSS
XFSOOUT
XOVDD
DVDD
DVSS
NSPMUTE
SOFTMUTE
PGMUTE
SCDT
SCSHIFT
SCLATCH
OVF FLAGR
OVF FLAGL
SFLAG
INIT
MCKSEL
LRCK
BCK
DATA

IC101-106 CXD9774M


GND ①
PWM BP ②
GND ③
RESET ④
DREG RTN ⑤
GVDD ⑥
M3 ⑦
DREG ⑧
DGND ⑨
M1 ⑩
M2 ⑪
DVDD ⑫
SD ⑬
DGND ⑭
OTW ⑮
GND ⑯
PWM AP ⑰
GND ⑱
GVDD A ⑲
GVDD A ⑳
GND ㉑
BST A ㉒
PVDD A ㉓
PVDD A ㉔
OUT A ㉕
OUT A ㉖
GND ㉗
GND ㉘
OUT B ㉙
OUT B ㉚
PVDD B ㉛
PVDD B ㉜
BST B ㉝
GND ㉞
GVDD B ㉟
GVDD B ㊱
PWM RECEIVER
DVDD DREG
DGND
TIMING CONTROL & PROTECTION
GATE DRIVE
OCH
OCL
DIGITAL REGULATOR
DREG
GVDD
PROTECTION LOGIC
OT & UVP

- **IC Pin Function Description**
- **DMB07 BOARD IC207 ZIVA5X-C2F (DVD SYSTEM PROCESSOR)**

Pin No.	Pin Name	I/O	Description
1	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
2	HA1	I/O	Address bus
3	HD15	I/O	Data bus (address signal multiplexed)
4	HD14	I/O	Data bus (address signal multiplexed)
5	HD13	I/O	Data bus (address signal multiplexed)
6	HD12	I/O	Data bus (address signal multiplexed)
7	HD11	I/O	Data bus (address signal multiplexed)
8	HD10	I/O	Data bus (address signal multiplexed)
9	HD9	I/O	Data bus (address signal multiplexed)
10	HD8	I/O	Data bus (address signal multiplexed)
11	HD7	I/O	Data bus (address signal multiplexed)
12	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
13	GNDP	—	Ground terminal (I/O signal)
14	HD6	I/O	Data bus (address signal multiplexed)
15	HD5	I/O	Data bus (address signal multiplexed)
16	HD4	I/O	Data bus (address signal multiplexed)
17	HD3	I/O	Data bus (address signal multiplexed)
18	HD2	I/O	Data bus (address signal multiplexed)
19	HD1	I/O	Data bus (address signal multiplexed)
20	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
21	GNDP	—	Ground terminal (I/O signal)
22	HD0	I/O	Data bus (address signal multiplexed)
23	HDTACK	I/O	Acknowledge signal input/output for host data transfer (not used)
24	HIRQ0	I	Interrupt signal input for Medusa (not used)
25	WEH.UDS	I/O	Host upper data strobe signal output
26	WEL.LDS	I/O	Host lower data strobe signal output (not used)
27	HREAD	I/O	Read/write strobe signal output
28	GPIO0	I/O	Jig detection port (pull-up)
29	GND	—	Ground terminal (inside core)
30	VDD	—	Power supply terminal (+1.8V) (inside core)
31	GND25	—	Ground terminal (SDRAM I/O signal)
32	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
33	MA9	O	SDRAM address bus
34	MA8	O	SDRAM address bus
35	MA7	O	SDRAM address bus
36	MA6	O	SDRAM address bus
37	MA5	O	SDRAM address bus
38	MA4	O	SDRAM address bus
39	MA3	O	SDRAM address bus
40	MA2	O	SDRAM address bus
41	MA1	O	SDRAM address bus
42	MA0	O	SDRAM address bus
43	GND25	—	Ground terminal (SDRAM I/O signal)
44	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
45	MA10	O	SDRAM address bus
46	MA11	O	SDRAM address bus
47	BA1	O	SDRAM bank select 1 signal output

Pin No.	Pin Name	I/O	Description
48	BA0	O	SDRAM bank select 0 signal output
49	MCS0	O	SDRAM chip select 0 signal output
50	MCS1	O	Not used
51	MRAS	O	SDRAM row address strobe signal output
52	MCAS	O	SDRAM column address strobe signal output
53	MWE	O	SDRAM write enable signal output (“H” : read, “L” : write)
54	GND25	—	Ground terminal (SDRAM I/O signal)
55	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
56	MCLK	O	SDRAM Clock output
57	MD0	I/O	SDRAM data
58	MD1	I/O	SDRAM data
59	MD2	I/O	SDRAM data
60	MD3	I/O	SDRAM data
61	GND25	—	Ground terminal (SDRAM I/O signal)
62	MDQM0	O	Byte read /write mask signal 0 output
63	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
64	MD4	I/O	SDRAM data
65	MD5	I/O	SDRAM data
66	MD6	I/O	SDRAM data
67	MD7	I/O	SDRAM data
68	MD8	I/O	SDRAM data
69	MD9	I/O	SDRAM data
70	MD10	I/O	SDRAM data
71	MD11	I/O	SDRAM data
72	GND25	—	Ground terminal (SDRAM I/O signal)
73	MDQM1	O	Byte read /write mask signal 1 output
74	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
75	MD12	I/O	SDRAM data
76	MD13	I/O	SDRAM data
77	MD14	I/O	SDRAM data
78	MD15	I/O	SDRAM data
79	GND	—	Ground terminal (inside core)
80	VDD	—	Power supply terminal (+1.8V) (inside core)
81	MD16	I/O	SDRAM data
82	MD17	I/O	SDRAM data
83	MD18	I/O	SDRAM data
84	MD19	I/O	SDRAM data
85	GND25	—	Ground terminal (SDRAM I/O signal)
86	MDQM2	O	Byte read /write mask signal 2 output
87	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
88	MD20	I/O	SDRAM data
89	MD21	I/O	SDRAM data
90	MD22	I/O	SDRAM data
91	MD23	I/O	SDRAM data
92	MD24	I/O	SDRAM data
93	MD25	I/O	SDRAM data
94	MD26	I/O	SDRAM data

Pin No.	Pin Name	I/O	Description
95	MD27	I/O	SDRAM data
96	GND25	—	Ground terminal (SDRAM I/O signal)
97	MDQM3	O	Byte read /write mask signal 3 output
98	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
99	MD28	I/O	SDRAM data
100	MD29	I/O	SDRAM data
101	MD30	I/O	SDRAM data
102	MD31	I/O	SDRAM data
103	GND25	—	Ground terminal (SDRAM I/O signal)
104	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
105	VCLK	I/O	System clock (not used)
106	XCK_I/O_SEL	I/O	5.1ch/downmix switch signal output
107	VS	O	S1 signal output
108	I/P SW	O	Progressive/interlace switch signal output (not used)
109	CDSEL	O	CD-DA selection signal output (not used)
110	MREQ	O	Audio muting request signal output
111	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
112	GNDP	—	Ground terminal (I/O signal)
113	MDI	O	Serial data output to the D/A converter (IC332)
114	MC	O	Serial data clock output to the D/A converter (IC332)
115	ML	O	Latch enable signal output to the D/A converter (IC332)
116	HIRQ2_	I	Busy signal input from the EEPROM (IC204)
117	VDAC_4B	—	Video DAC bias bit 4 (connected to the ground)
118	VDAC_VDD4	—	Power supply terminal (+3.3V) (Video DAC 4)
119	VDAC_4	O	VDAC output 4
120	VDAC_3B	—	Video DAC bias bit 3 (connected to the ground)
121	VDAC_VDD3	—	Power supply terminal (+3.3V) (Video DAC 3)
122	VDAC_3	O	VDAC output 3
123	VDAC_2B	—	Video DAC bias bit 2 (connected to the ground)
124	VDAC_VDD2	—	Power supply terminal (+3.3V) (Video DAC 2)
125	VDAC_2	O	VDAC output 2
126	VDAC_1B	—	Video DAC bias bit 1 (connected to the ground)
127	VDAC_VDD1	—	Power supply terminal (+3.3V) (Video DAC 1)
128	VDAC_1	O	VDAC output 1
129	VDAC_0B	—	Video DAC bias bit 0 (connected to the ground)
130	VDAC_VDD0	—	Power supply terminal (+3.3V) (Video DAC 0)
131	VDAC_0	O	VDAC output 0
132	VDAC_DVSS	—	Ground terminal (Video DAC digital system)
133	VDAC_DVDD	—	Power supply terminal (+3.3V) (Video DAC digital system)
134	VDAC_REFVDD	—	Power supply terminal (Video DAC reference)
135	VDAC_REF	I	Reference voltage input terminal(for Video DAC)
136	VDAC_REFVSS	—	Ground terminal (Video DAC reference)
137	XVSS	—	Ground terminal (crystal oscillator)
138	XOUT	O	Crystal oscillation signal output
139	XIN	I	Crystal oscillation signal input
140	XVDD	—	Power supply terminal (crystal oscillator)
141	AVSS2	—	Ground terminal (analog PLL)

Pin No.	Pin Name	I/O	Description
142	AVDD2	—	Power supply terminal (+3.3V) (analog PLL)
143	AVDD1	—	Power supply terminal (+3.3V) (analog PLL)
144	AVSS1	—	Ground terminal (analog PLL)
145	VDD	—	Power supply terminal (+1.8V) (inside core)
146	GND	—	Ground terminal (inside core)
147	XCK	O	Audio system clock output
148	LRCK	O	LRCK signal output for audio
149	BCK	O	BCK signal output for audio
150	DATA0(DM)	O	Audio data(Down Mix signal) output
151	DATA1(FLR)	O	Audio data(Front L/R signal) output
152	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
153	GNDP	—	Ground terminal (I/O signal)
154	DATA2(SLR)	O	Audio data(Rear L/R signal) output
155	DATA3(CSW)	O	Audio data(Center/Subwoofer signal) output
156	IEC958	O	S/PDIF signal (not used)
157	DAI_DATA	I	Data input from ADC (not used)
158	DAI_BCK	I	BCK signal input from ADC (not used)
159	DAI_LRCK	I	LRCK signal input from ADC (not used)
160	I2C_CL	I/O	I2C clock bus
161	I2C_DA	I/O	I2C data bus
162	CS(ZIVA_E2P)	O	Chip select signal output to the EEPROM (IC204)
163	RXD1	I	Serial data input for check jig
164	TXD1	O	Serial data output for check jig
165	WRITE_CTRL (ZIVA_E2P)	O	Write control signal output to the EEPROM (IC204)
166	GNDP	—	Ground terminal (I/O signal)
167	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
168	SDDATA7	I	SDBus data7 input
169	SDDATA6	I	SDBus data6 input
170	SDDATA5	I	SDBus data5 input
171	SDDATA4	I	SDBus data4 input
172	GND	—	Ground terminal (inside core)
173	VDD	—	Power supply terminal (+1.8V) (inside core)
174	SDDATA3	I	SDBus data3 input
175	SDDATA2	I	SDBus data2 input
176	SDDATA1	I	SDBus data1 input
177	SDDATA0	I	SDBus data0 input
178	SDREQ	O	SDBus data request signal output
179	SDEN	I	SDBus data enable signal input
180	GNDP	—	Ground terminal (I/O signal)
181	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
182	SDERROR	I	SDBus data error signal input
183	SDCLK	I	SDBus data clock input
184	HIRQ1	I	Interrupt signal input from the mechanism controller (IC901)
185	DRVCLK	I	Serial data clock input from the mechanism controller (IC901)
186	DRVTX	I	Serial data input from the mechanism controller (IC901) and the EEPROM (IC204)
187	DRVRX	O	Serial data output to the mechanism controller (IC901) and the EEPROM (IC204)

Pin No.	Pin Name	I/O	Description
188	DRVRDY	I	Ready signal input from the mechanism controller (IC901)
189	VNW	—	Power supply for 5V tolerance voltage input
190	ALE	O	Latch enable signal output for address data demux
191	RST_SPC	O	Reset signal output to the mechanism controller (IC901)
192	INT/EXT	O	Input selection signal output for SDBus or ADC
193	HCS2	O	Chip select signal output for Medusa (not used)
194	HCS1	I/O	Not used
195	HCS0	O	Chip select signal output to the external ROM (IC206)
196	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
197	TRST	I	Reset signal input
198	TDO	O	Data output
199	TDI	I	Data input
200	TMS	I	TMS signal input
201	TCK	I	TCK signal input
202	RESET	I	ZIVA reset input
203	BUS CLK	I/O	Not used
204	GND	—	Ground terminal (inside core)
205	VDD	—	Power supply terminal (+1.8V) (inside core)
206	HA3	I/O	Address bus 3
207	HA2	I/O	Address bus 2
208	GNDP	—	Ground terminal (I/O signal)

• DMB07 BOARD IC701 TMC57929PGF-RDP (DVD DECODER)

Pin No.	Pin Name	I/O	Description
1, 2	D5, D6	I/O	Two-way data bus with the mechanism controller
3	VSS	—	Ground terminal (digital system)
4	D7	I/O	Two-way data bus with the mechanism controller
5	A0	I	Address signal input from the mechanism controller
6	VDD	—	Power supply terminal (+3.3V) (digital system)
7	A1	I	Address signal input from the mechanism controller
8	VDD5V	—	Power supply terminal (+5V)
9 to 14	A2 to A7	I	Address signal input from the mechanism controller
15	VSS	—	Ground terminal (digital system)
16	XWAIT	O	Wait signal output terminal Not used
17	XRD	I	Read strobe signal input from the mechanism controller
18	XWR	I	Write strobe signal input from the mechanism controller
19	XCS	I	Chip select signal input from the mechanism controller
20, 21	XINT0, XINT1	O	Interrupt signal output to the mechanism controller
22	VDD	—	Power supply terminal (+3.3V) (digital system)
23	XHRS	I	Not used
24	HDB7	O	Stream data signal output to the DSD decoder and DVD system processor
25	VSS	—	Ground terminal (digital system)
26	HDB8	O	Error flag signal output to the DSD decoder and DVD system processor
27	HDB6	O	Stream data signal output to the DSD decoder and DVD system processor
28	VDDS	—	Power supply terminal (+5V) (digital system)
29	HDB9	O	Not used
30	HDB5	O	Stream data signal output to the DSD decoder and DVD system processor
31	HDBA	O	Not used
32	HDB4	O	Stream data signal output to the DSD decoder and DVD system processor
33	VSS	—	Ground terminal (digital system)
34	HDBB	O	Not used
35	HDB3	O	Stream data signal output to the DSD decoder and DVD system processor
36	VDD	—	Power supply terminal (+3.3V) (digital system)
37	HDBC	O	Not used
38	VDDS	—	Power supply terminal (+5V) (digital system)
39	HDB2	O	Stream data signal output to the DSD decoder and DVD system processor
40	HDBD	O	Not used
41	HDB1	O	Stream data signal output to the DSD decoder and DVD system processor
42	VSS	—	Ground terminal (digital system)
43	HDBE	O	Not used
44	HDB0	O	Stream data signal output to the DSD decoder and DVD system processor
45	HDBF	O	Not used
46	XSAK	O	Serial data effect flag signal output to the DSD decoder and DVD system processor
47	VDDS	—	Power supply terminal (+5V) (digital system)
48	XDCK	O	Serial data transfer clock signal output to the DSD decoder and DVD system processor
49	XSHD	O	Header flag signal output to the DSD decoder
50	VDD	—	Power supply terminal (+3.3V) (digital system)
51	REDY	O	Not used
52	VSS	—	Ground terminal (digital system)

Pin No.	Pin Name	I/O	Description
53	XSRQ	I	“DVD mode: Serial data request signal input from the DVD system processor SACD mode: Serial data request signal input from the DSD decoder”
54	HINT	O	Not used
55	XS16	O	Not used
56	HA1	I	Not used
57	XPDI	I/O	Not used
58	VDDS	—	Power supply terminal (+5V) (digital system)
59, 60	HA0, HA2	I	Not used
61	VSS	—	Ground terminal (digital system)
62, 63	HCS0, HCS1	I	Not used
64	VDD	—	Power supply terminal (+3.3V) (digital system)
65	DASP	I/O	Not used
66 to 69	MDB0 to MDB3	I/O	Two-way data bus with the D-RAM
70	VSS	—	Ground terminal (digital system)
71	MDB4	I/O	Two-way data bus with the D-RAM
72	VDD5V	—	Power supply terminal (+5V)
73 to 75	MDB5 to MDB7	I/O	Two-way data bus with the D-RAM
76	XMWR	O	Write enable signal output to the D-RAM
77	VDD	—	Power supply terminal (+3.3V) (digital system)
78	XRAS	O	Row address strobe signal output to the D-RAM
79, 80	MA0, MA1	O	Address signal output to the D-RAM
81	VSS	—	Ground terminal (digital system)
82 to 87	MA2 to MA7	O	Address signal output to the D-RAM
88	VDD	—	Power supply terminal (+3.3V) (digital system)
89	MA8	O	Address signal output to the D-RAM
90	VSS	—	Ground terminal (digital system)
91	MA9	O	Address signal output to the D-RAM
92	MNT1	O	EEPROM ready signal output to the mechanism controller
93	MNT2	O	Operation clock signal output for PSP physical disc mark detection to DSD decoder
94	XMOE	O	Output enable signal output to the D-RAM
95	XCAS	O	Column address strobe signal output to the D-RAM
96, 97	MDB8, MDB9	I/O	Two-way data bus with the D-RAM
98	VSS	—	Ground terminal (digital system)
99	MDBA	I/O	Two-way data bus with the D-RAM
100	VDD	—	Power supply terminal (+3.3V) (digital system)
101, 102	MDBB, MDBC	I/O	Two-way data bus with the D-RAM
103	VDD5V	—	Power supply terminal (+5V)
104 to 106	MDBD to MDBF	I/O	Two-way data bus with the D-RAM
107	GFS	O	Guard frame sync signal output to the mechanism controller
108	VSS	—	Ground terminal (digital system)
109	APEO	O	Absolute phase error signal output
110	VDD	—	Power supply terminal (+3.3V) (digital system)
111	DASYO	O	RF binary signal output
112	GNDA5	—	Ground terminal (analog system)
113, 114	ASF1, AFS2	—	Filter connected terminal for selection the constant asymmetry compensation
115	DASYI	I	Analog signal input after integrated from the RF binary signal
116	RFDCC	I	Input terminal for adjusting DC cut high-pass filter for RF signal Not used

Pin No.	Pin Name	I/O	Description
117	RFIN	I	RF signal input from the DVD/CD RF amplifier
118, 119	VCCA5, VCCA4	—	Power supply terminal (+3.3V) (analog system)
120	VCOR1	—	VCO oscillating range setting resistor connected terminal
121	VCOIN	I	VCO input terminal
122, 123	GNDA4, GNDA3	—	Ground terminal (analog system)
124	LPF5	O	Signal output from the operation amplifier from PLL loop filter
125	VC1	I	Middle point voltage (+1.65V) input terminal
126, 127	LPF2, LPF1	I	Inverted signal input to the operation amplifier from PLL loop filter
128, 129	VCCA3, VCCA2	—	Power supply terminal (+3.3V) (analog system)
130	PD0	O	Signal output from the charge pump for phase comparator
131	PDHVCC	I	Middle point voltage input terminal for RF PLL
132	FDO	O	Signal output from the charge pump for frequency comparator
133, 134	GNDA2, GNDA1	—	Ground terminal (analog system)
135	SPO	O	Spindle motor control signal output
136	VC2	I	Middle point voltage (+1.65V) input terminal
137	MDIN2	I	Spindle motor servo drive signal input
138	MDIN1	I	MDP input terminal
139	VCCA1	—	Power supply terminal (+3.3V) (analog system)
140	CLVS	O	Control signal output for selection the spindle control filter constant at CLVS
141	VSS	—	Ground terminal (digital system)
142	MDSOUT	O	Frequency error output terminal of internal CLV circuit
143	VDD	—	Power supply terminal (+3.3V) (digital system)
144	MDPOUT	O	Phase error output terminal of internal CLV circuit
145	DEFECT	I	Defect signal input terminal (conected to ground terminal)
146	GSCOR	I	Guard subcode sync (S0+S1) detection signal input from the digital signal processor
147	EXCK	O	Subcode serial data reading clock signal output to the digital signal processor
148	SBIN	I	Subcode serial data input from the digital signal processor
149	VSS	—	Ground terminal (digital system)
150	SCOR	I	Subcode sync (S0+S1) detection signal input from the digital signal processor
151	WFCK	I	Write frame clock signal input from the digital signal processor
152	VDD5V	—	Power supply terminal (+5V)
153	XRCI	I	RAM overflow signal input terminal (conected to ground terminal)
154	VDDS	—	Power supply terminal (+5V) (digital system)
155	C2PO	I	C2 pointer signal input from the digital signal processor
156	VDD	—	Power supply terminal (+3.3V) (digital system)
157	DBCK	O	Bit clock signal (2.8224 MHz) output terminal Not used
158	BCLK	I	Bit clock signal (2.8224 MHz) input from the digital signal processor
159	DDAT	O	PCM data output terminal Not used
160	MDAT	I	Serial data input from the digital signal processor
161	VSS	—	Ground terminal (digital system)
162	DLRC	O	L/R sampling clock signal (44.1 kHz) output terminal Not used
163	LRCK	I	L/R sampling clock signal (44.1 kHz) input from the digital signal processor
164	XRST	I	Reset signal input from the mechanism controller “L”: reset
165	IFS0	I	Interface selection signal input terminal Fixed at “L” in this set
166	IFS1	I	Interface selection signal input terminal Fixed at “H” in this set
167	XTAL	I	33.8688 MHz clock signal input terminal
168	VSS	—	Ground terminal (digital system)

Pin No.	Pin Name	I/O	Description
169	XTL2	O	System clock output terminal (33.8688 MHz)
170	XTL1	I	System clock input terminal (33.8688 MHz)
171	VDD	—	Power supply terminal (+3.3V) (digital system)
172 to 176	D0 to D4	I/O	Two-way data bus with the mechanism controller

• DMB07 BOARD IC901 CXP973064-243R (MECHANISM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	NO USE	O	Not used
2	SDEN	O	Serial data enable signal output to DVD/CD RF amplifier
3	DOCTRL/ ISBTEST	O	Digital out on/off control signal output to the digital signal processor “L”: digital out off, “H”: digital out on
4	XPST 2753	O	Reset signal output for DSD decoder
5	SDA EEP	I/O	Two-way data bus with the EEPROM
6	MNT1	I	EEPROM ready signal input from the DVD decoder
7	FCS JMP 1	O	Focus jump 1 signal output to the motor/coil driver
8	FCS JMP 2	O	Focus jump 2 signal output to the motor/coil driver
9	SENS CD	I	Internal status (SENSE) signal input from the digital signal processor
10	CDSP2	O	Loading motor drive signal (loading in direction) output terminal
11	CDSP4	O	Loading motor drive signal (loading out direction) output terminal
12	XCS DVD	O	Chip select signal output to the DVD decoder
13	VSS	—	Ground terminal (digital system)
14 to 21	D0 to D7	I/O	Two-way data bus with the DVD decoder
22	INIT0 DVD	I	Interrupt signal input from the DVD decoder
23	INIT1 DVD	I	Interrupt signal input from the DVD decoder
24	MSCK SAMBA	O	Serial data transfer clock signal output to the DSD decoder
25	XRST 1882	O	Reset signal output to the DVD decoder “L”: reset
26	SCOR	I	Subcode sync (S0+S1) detection signal input from the digital signal processor
27	LAT CD	O	Serial data latch pulse signal output to the digital signal processor
28	LD ON	O	Laser diode on/off control signal output to the DVD/CD RF amplifier “L”: laser diode off, “H”: laser diode on
29	MIRR	I	Mirror signal input from the digital signal processor
30	COUT CD	I	Numbers of track counted signal input from the digital signal processor
31	INLIM	I	Detection signal input from limit in switch The optical pick-up is inner position when “H”
32	CS ZIVA	O	Chip select signal output to the DVD system processor
33	SI ZIVA	I	Serial data input from the DVD system processor
34	SO ZIVA	O	Serial data output to the DVD system processor
35	SCK ZIVA	O	Serial data transfer clock signal output to the DVD system processor
36	DRVIRQ	O	Interrupt request signal output to the DVD system processor
37	DRVRDY	O	Ready signal output to the DVD system processor
38	RST	I	System reset signal input from the DVD system processor “L”: reset
39	VSS	—	Ground terminal (digital system)
40	XTAL	I	System clock input terminal (20 MHz)
41	EXTAL	O	System clock output terminal (20 MHz)
42	VDD	—	Power supply terminal (+3.3V) (digital system)
43, 44	SLED A, SLED B	O	Sled motor drive signal output
45	SCK DSD	O	Output terminal for offset adjustment of APEO
46	SDOUT DSD	O	Serial data output to the DSD decoder
47	SDIN DSD	I	Serial data input from the DSD decoder
48	READY DSD	I	Ready signal input from the DSD decoder “L”: ready
49	DATA CD	O	Serial data output to the digital signal processor
50	CLOK CD	O	Serial data transfer clock signal output to the digital signal processor
51	XMSLAT	O	Serial data latch pulse signal output to the DSD decoder
52	SQSO	I	Subcode Q data input from the digital signal processor

Pin No.	Pin Name	I/O	Description
53	MUTE DSD	O	Muting on/off control signal output to the DSD decoder “H”: muting on
54	SQCK	O	Subcode Q data reading clock signal output to the digital signal processor
55	VSS	—	Ground terminal (digital system)
56	CONTROL 2	I	Disc tray in detection signal input terminal Not used
57	CONTROL 1	I	Disc tray out detection signal input terminal Not used
58	GFS DVD	I	Guard frame sync signal input from the DVD decoder
59	MUTE CD	O	Muting on/off control signal output to the digital signal processor “H”: muting on
60	MUTE 2D	O	Muting on/off control signal output to the motor/coil driver “H”: muting on
61	SLED	I	Sled motor servo drive PWM signal input terminal
62	FG	I	Spindle motor control signal input
63	SP ON	O	Muting on/off control signal output to the motor/coil driver “H”: muting on
64	JIT	I	Jitter signal input
65	TE	I	Tracking error signal input from the DVD/CD RF amplifier
66	PI	I	Pull in signal input from the DVD/CD RF amplifier
67	FE	I	Focus error signal input from the DVD/CD RF amplifier
68	AVSS	—	Ground terminal (for A/D converter)
69	AVREF	I	Reference voltage input terminal (for A/D converter)
70	AVDD	—	Power supply terminal (+3.3V) (for A/D converter)
71	GFS CD	I	Guard frame sync signal input from the digital signal processor
72	SCLK CD	O	SENSE serial data reading clock signal output to the digital signal processor
73	TSD-M	O	Thermal shut down signal output to the motor/coil driver
74	FOK CD	I	Focus OK signal input from the digital signal processor
75	LOCK CD	I	GFS is sampled by 460 Hz “H” input when GFS is “H”
76	LDSEL	O	Laser diode selection signal output
77	SACD/$\overline{\text{DVD}}$	O	“SACD/DVD selection signal output “L”: DVD, “H”: SACD”
78	I2C SIO	I/O	Communication data bus with the DVD system processor and system controller
79	I2C SCL	I/O	Communication data reading clock signal input or transfer clock signal output with the DVD system processor and system controller
80	RXD	I	Serial data input (RS-232C)
81	TXD	O	Serial data output (RS-232C)
82	SDCLK RF	O	Serial data transfer clock signal output to the DVD/CD RF amplifier
83	SDATA RF	I/O	Two-way data bus with the DVD/CD RF amplifier
84	XWR	O	Write strobe signal output to the DVD decoder
85	XRD	O	Read strobe signal output to the DVD decoder
86	(PWE)	—	Not used
87	VDD	—	Power supply terminal (+3.3V) (digital system)
88	VSS	—	Ground terminal (digital system)
89 to 96	A0 to A7	O	Address signal output to the DVD decoder
97	A8	O	Motor/coil driver power save control signal output terminal
98	XDRST	O	Reset signal output to the digital signal processor and DSD decoder “L”: reset
99	WP EEP	O	Write protect signal output to the EEPROM
100	SCL EEP	O	Clock signal output to the EEPROM

• MAIN BOARD IC509 uPD703261YGF-S21-JBT-A (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	HP SW	I	Switch headphone is insert input
2	HP MUTE	O	Control of muting headphone signal output
3	AVREF0	—	Analog reference voltage for A/D converter
4	AVSS	—	Analog ground
5	V CONTROL	O	Voltage control signal output to the switching regulator
6	AC_ON/OFF	O	AC power on/off signal output to the switching regulator
7	AVREF1	—	Analog reference voltage for D/A converter
8	DRIVE_OCP	I	Over load detect signal input
9	DRIVE_RST	O	System Reset signal output to the power driver
10	FLASH0	I	Flash programing mode (pull down)
11	VDD	—	Power supply(+3.3V)
12	REGC	—	Regulator control-connect
13	VSS	—	Terminal Ground
14	X1	I	Crystal input for main clock
15	X2	O	Crystal output for main clock
16	RESET	I	System reset signal input
17	XT1	—	Not used
18	XT2	—	Not used
19	DIAT XRST	—	Not used
20	KEY INT	I	Wake up from ECO mode by key input
21	RM_INT	I	Wake up from ECO mode by sircs input
22	(Can’t USE)	I	Can’t Use Port
23	AC_CUT	I	Detect AC-CUT (primary power off)
24	NO USE	—	Not used
25	NO USE	—	Not used
26	NO USE	—	Not used
27	FL_D_OUT/LED_DATA	O	Data output to the FL driver/LED driver
28	NO USE	—	Not used
29	FL_CLK	O	Clock signal output to the FL driver/LED driver
30	FL_CS/STB	O	Chip select signal output to the FL driver
31	LED_RST	O	Reset signal output to the LED driver
32	BACK LIGHT	O	Back light output
33	STBY_LED	O	Standby LED control signal output
34	SIRCS_IN	I	Sircs input
35	EVSS	—	Terminal Ground
36	EVDD	—	Power supply(+3.3V)
37	12C DATA	I/O	Two-way 12C data bus with the DVD system processor and mechanism controller
38	12C CLK	I/O	Two-way 12C clock bus with the DVD system processor and mechanism controller
39	MUTE REQ	O	Mute Req signal output to the DSP
40	SYS RESET	O	Signal reset signal output to the DSP
41	LED LAT/DF INIT	O	LED LAT signal output to the LED driver
42	DIAT XSCEN	—	Not used
43	DIAT SDATA DAMP SCDT	O	Digital amp serial data output
44	DIAT SCLK/ DAMP SHIFT	O	Digital amp shift clock signal data output
45	DAMP LATCH1	O	Digital amp chip select1 signal output

Pin No.	Pin Name	I/O	Description
46	DAMP LATCH2	O	Digital amp chip select2 signal output
47	DAMP LATCH3	O	Digital amp chip select3 signal output
48	DAMP INIT	O	Digital amp reset signal output
49	DAMP SOFT MUTE	O	Digital amp soft muting output
50	NO USE	—	Not used
51	NO USE	—	Not used
52	NO USE	—	Not used
53	NO USE	—	Not used
54	NO USE	—	Not used
55	NO USE	—	Not used
56	NO USE	—	Not used
57	NO USE	—	Not used
58	NO USE	—	Not used
59	DIAT CSOD	O	Diat csdo signal output
60	RDS CLK	I	RDS clock input (not used)
61	RDS DATA	I	RDS data input (not used)
62	D_SENSE	I	DISC Senser signal input
63	ELV-E3	I	Rotary Encoder(MD) E4 signal input
64	ELV-E2	I	Rotary Encoder(MD) E3 signal input
65	ELV-E1	I	Rotary Encoder(MD) E2 signal input
66	ELV-E0	I	Rotary Encoder(MD) E1 signal input
67	SLD-E3	I	Rotary Encoder(ST) E4 signal input
68	SLD-E2	I	Rotary Encoder(ST) E3 signal input
69	SLD-E2	I	Rotary Encoder(ST) E2 signal input
70	SLD-E0	I	Rotary Encoder(ST) E1 signal input
71	BVSS	—	Terminal Ground
72	BVDD	—	Power supply (+3.3V)
73	CDM_SW3	O	SW3 Sub Tray signal output
74	CDM_SW2	I	SW2 Sub Tray signal input
75	CDM_SW4	I	SW4 Main tray signal input
76	CSM_SW1	O	SW1 Main tray signal output
77	ELV-P	O	Elevator moter pos signal output
78	ELV-N	O	Elevator moter neg signal output
79	LOD_POS	O	Loading moter pos signal output
80	LOD_NEG	O	Loading moter neg signal output
81	TUNED	I	Tuning detection signal input
82	PLL-CLK	O	Tuner clock output
83	PLL-DO	O	Tuner data output
84	PLL-CE	O	Tuner chip enable output
85	PLL-DI	I	Tuner data input
86	AVS0	O	Audio/Video select0 signal output
87	AVS1	O	Audio/Video select1 signal output
88	AVS2	O	Audio/Video select2 signal output
89	AVS3	O	Audio/Video select3 signal output
90	DVD_SEL	O	Video output select (DVD select) (No used)
91	RGB_SEL	O	VIDEO output select (RGB select) (No used)
92	OVERFLOW1	I	Over flow status1 of amp

Pin No.	Pin Name	I/O	Description
93	OVERFLOW2	I	Over flow status2 of amp
94	KEY2	I	Key input 2
95	KEY1	I	Key input 1
96	KEY0	I	Key input 0
97	DESTINATION	I	Destination select
98	MODEL	I	Model select
99	DEVICE1	I	Device select1(DISPLAY)
100	DEVICE2	I	Device select2(AMP)

SECTION 3
EXPLODED VIEWS

NOTE:

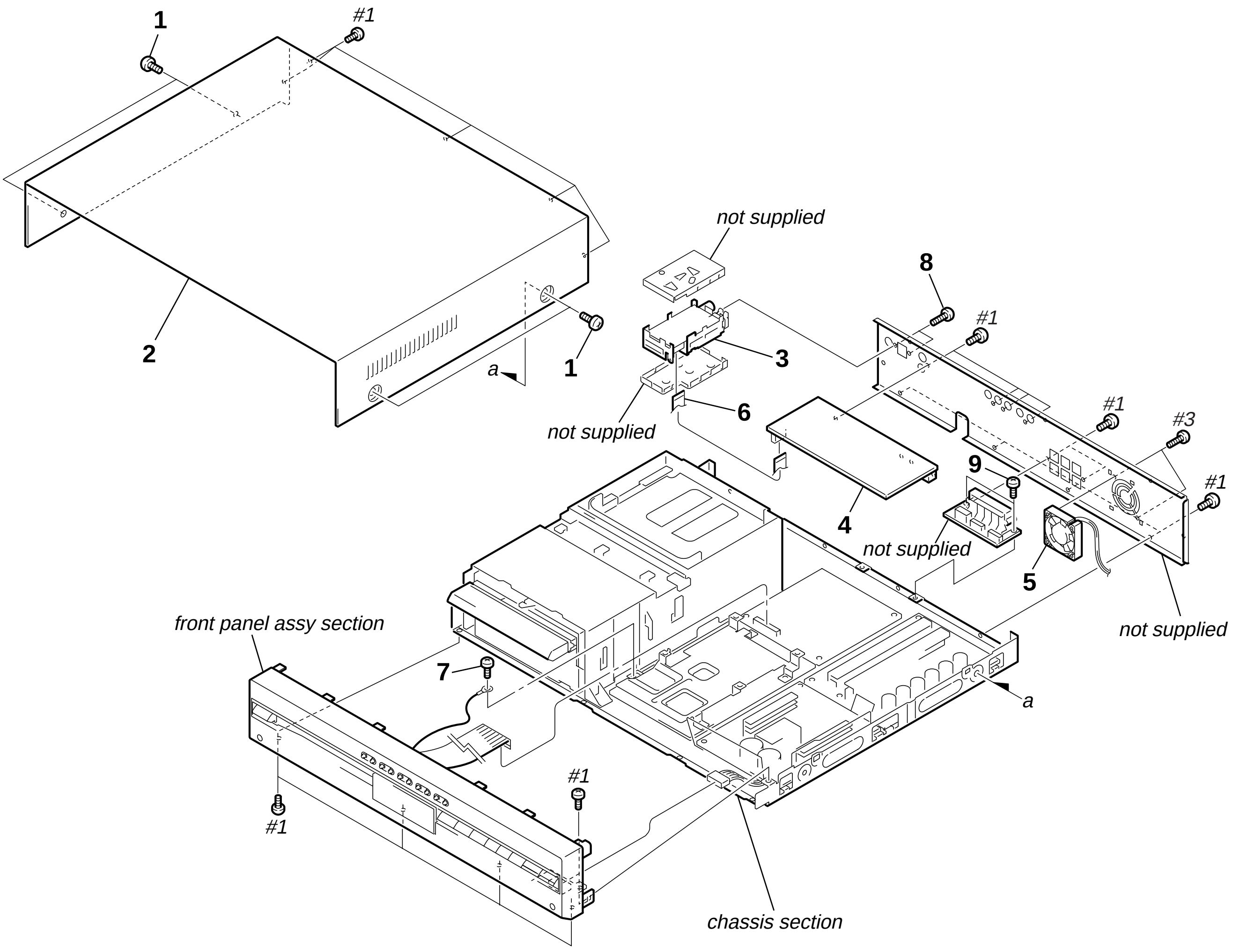
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation

AUS : Australian model
CND : Canadian model
E41 : 230V AC Area in E model
EA : Saudi Arabia model
KR : Korea model
MX : Mexican model
TW : Taiwan model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

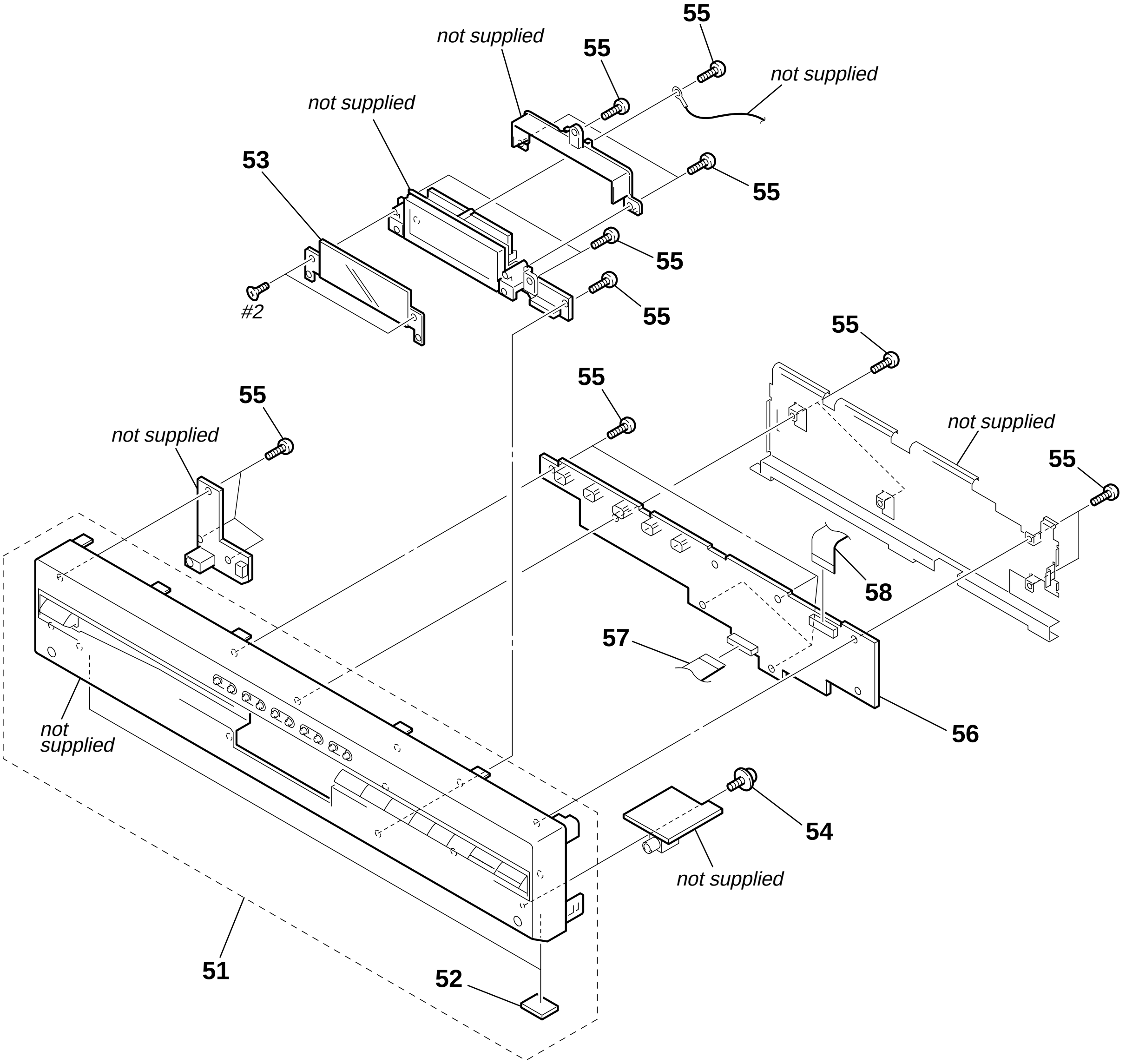
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

3-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark
1	4-221-580-01	SCREW, CASE (EXCEPT KR)	
1	3-363-099-22	SCREW (CASE 3 TP2) (KR)	
2	4-252-117-01	CASE	
3	A-4750-570-A	TUNER BOARD, UNIT (KR)	
3	A-4750-571-A	TUNER BOARD, UNIT (150: MX, TW, EA, E41, AUS/250: MX)	
3	A-4750-572-A	TUNER BOARD, UNIT (US, CND)	
4	A-4752-746-A	IO BOARD, COMPLETE (EXCEPT AUS)	
4	A-1053-130-A	IO BOARD, COMPLETE (AUS)	
5	1-763-861-12	FAN, DC	
6	1-828-962-11	WIRE (FLAT TYPE) (11 CORE)	
7	3-077-331-01	+BV3 (3-CR)	
8	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-685-881-09	SCREW +BVTT 4X8 (S)	

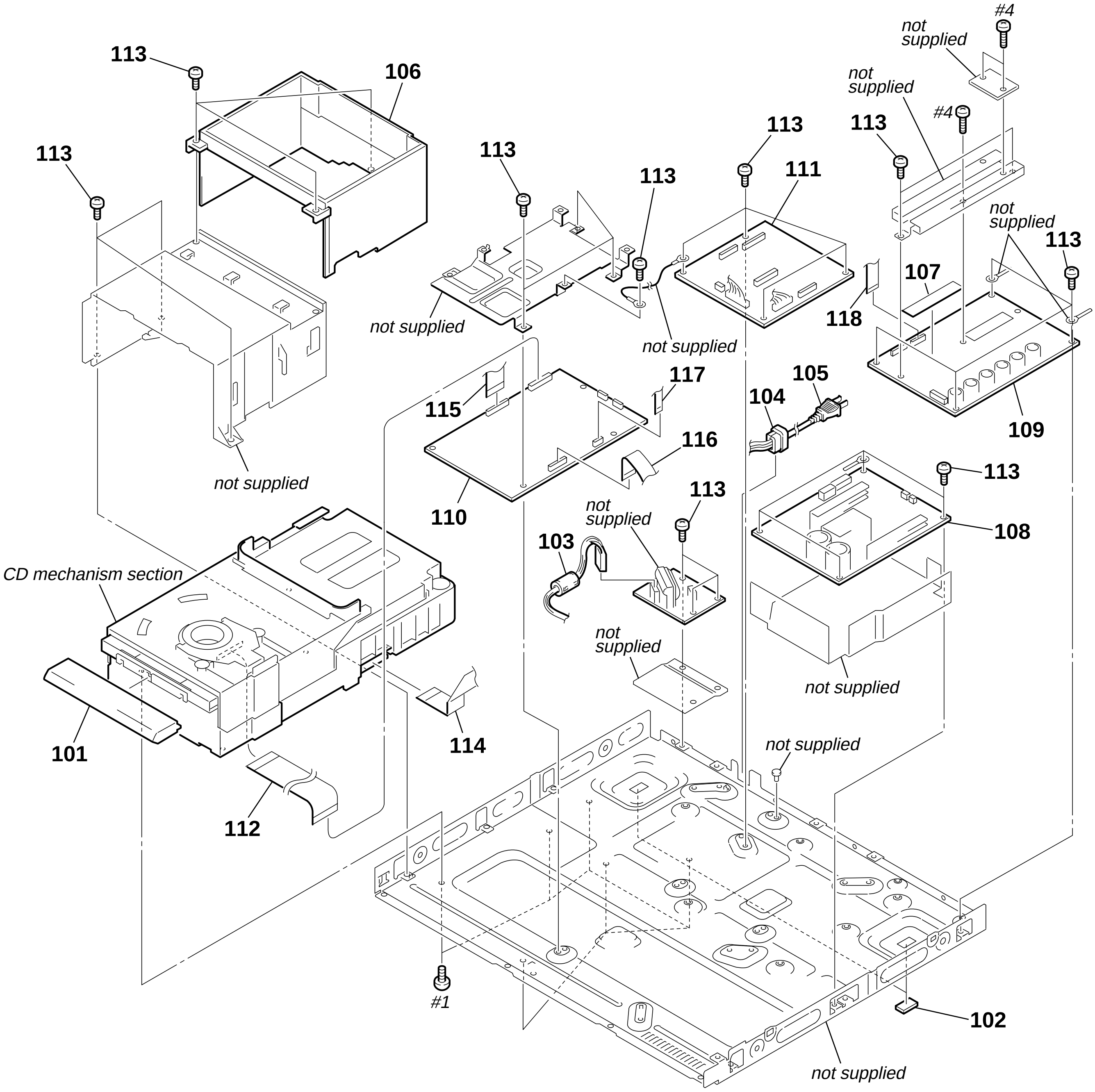
3-2. FRONT PANEL SECTION


55
not supplied
55
not supplied
not supplied
53
55
55
#2
55
55
55
55
not supplied
not supplied
55
58
57
56
not
supplied
54
not supplied
51
52

Ref. No.	Part No.	Description	Remark
51	X-4956-431-1	PANEL (BC) ASSY, FRONT (150: US, CND)	
51	X-2021-091-1	PANEL ASSY, FRONT (150: MX, TW, EA, E41, KR, AUS)	
51	X-2022-054-1	PANEL ASSY, FRONT (250: US, CND)	
51	X-2022-524-1	FRONT PANEL ASSY (250: MX)	
52	4-244-969-01	FOOT	
53	4-252-123-11	FL, WINDOW	

Ref. No.	Part No.	Description	Remark
54	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
55	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
56	A-4752-728-A	PANEL BOARD, COMPLETE	
57	1-962-870-11	WIRE (FLAT TYPE) (9 CORE)	
58	1-829-211-11	WIRE (FLAT TYPE) (19 CORE)	
#2	7-685-233-14	SCREW +KTP 2.6X6 TYPE2NON-SLIT	

3-3. CHASSIS SECTION-1


113
106
113
113
113
113
111
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#4
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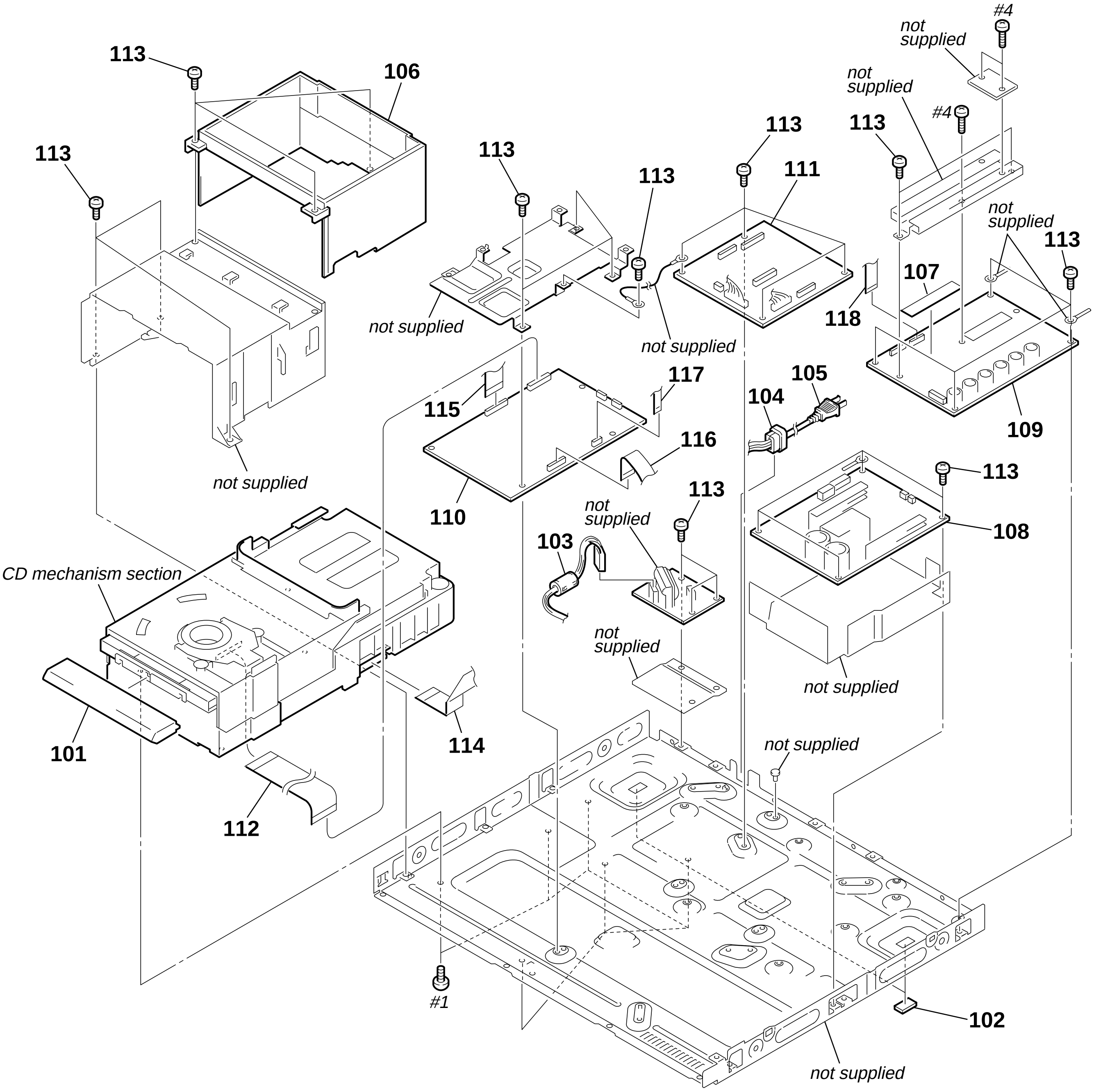
#4
113
not supplied
113
107
118
not supplied
not supplied
117
115
105
104
109
116
113
113
108
not supplied
110
not supplied
103
CD mechanism section
not supplied
not supplied
101
114
not supplied
112
#1
102
not supplied

Ref. No.	Part No.	Description	Remark
101	4-252-116-01	LID, DVD	
102	4-244-969-01	FOOT	
103	1-500-386-21	FILTER, CLAMP (FERRITE CORE)	
104	4-217-350-11	STOPPER, CORD	
⚠105	1-783-531-72	CORD, POWER (US, CND)	
⚠105	1-696-169-51	CORD, POWER (E41)	
⚠105	1-696-847-22	CORD, POWER (AUS)	
⚠105	1-751-520-21	CORD, POWER (EA)	
⚠105	1-775-789-91	CORD, POWER (MX)	
⚠105	1-827-597-41	CORD, POWER (TW)	
⚠105	1-769-079-32	CORD, POWER (KR)	
106	2-021-013-01	REAR COVER, MD	
107	4-254-947-11	SHEET (AMP), RADIATION	
⚠108	1-468-836-12	REGULATOR, SWITCHING (US, CND, MX, TW)	
⚠108	1-468-837-12	REGULATOR, SWITCHING (EA, E41, KR, AUS)	
109	A-1052-860-A	AMP BOARD, COMPLETE (150: MX)	
109	A-1053-123-A	AMP BOARD, COMPLETE (TW, EA, AUS)	
109	A-1054-633-A	AMP BOARD, COMPLETE (E41)	
109	A-1062-134-A	AMP BOARD, COMPLETE (250: US, CND)	
109	A-1067-906-A	AMP BOARD, COMPLETE (250: MX)	
109	A-4752-734-A	AMP BOARD, COMPLETE (150: US, CND, KR)	
110	A-1052-868-A	DMB07 BOARD, COMPLETE (150: MX)	
110	A-1053-135-A	DMB07 BOARD, COMPLETE (TW, EA, KR, AUS)	

– Continued on page 62 –

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

3-4. CHASSIS SECTION-2


113
106
113
113
113
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111
113
#4
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#4
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113
107
118
not supplied
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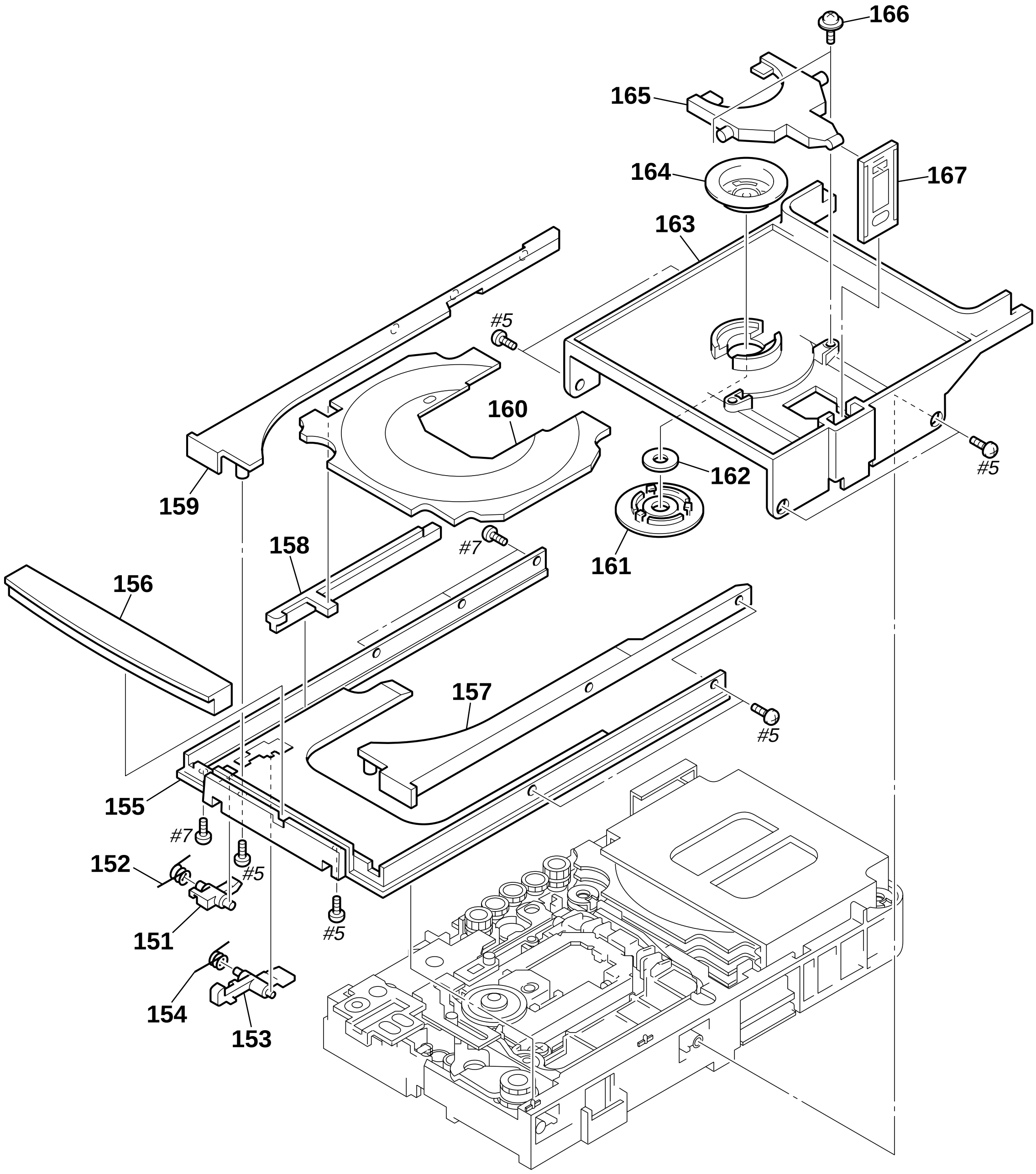
not supplied
117
115
105
104
116
110
113
109
113
108
not supplied
not supplied
103
CD mechanism section
not supplied
not supplied
not supplied
101
114
112
#1
102
not supplied

– Continued from page 61 –

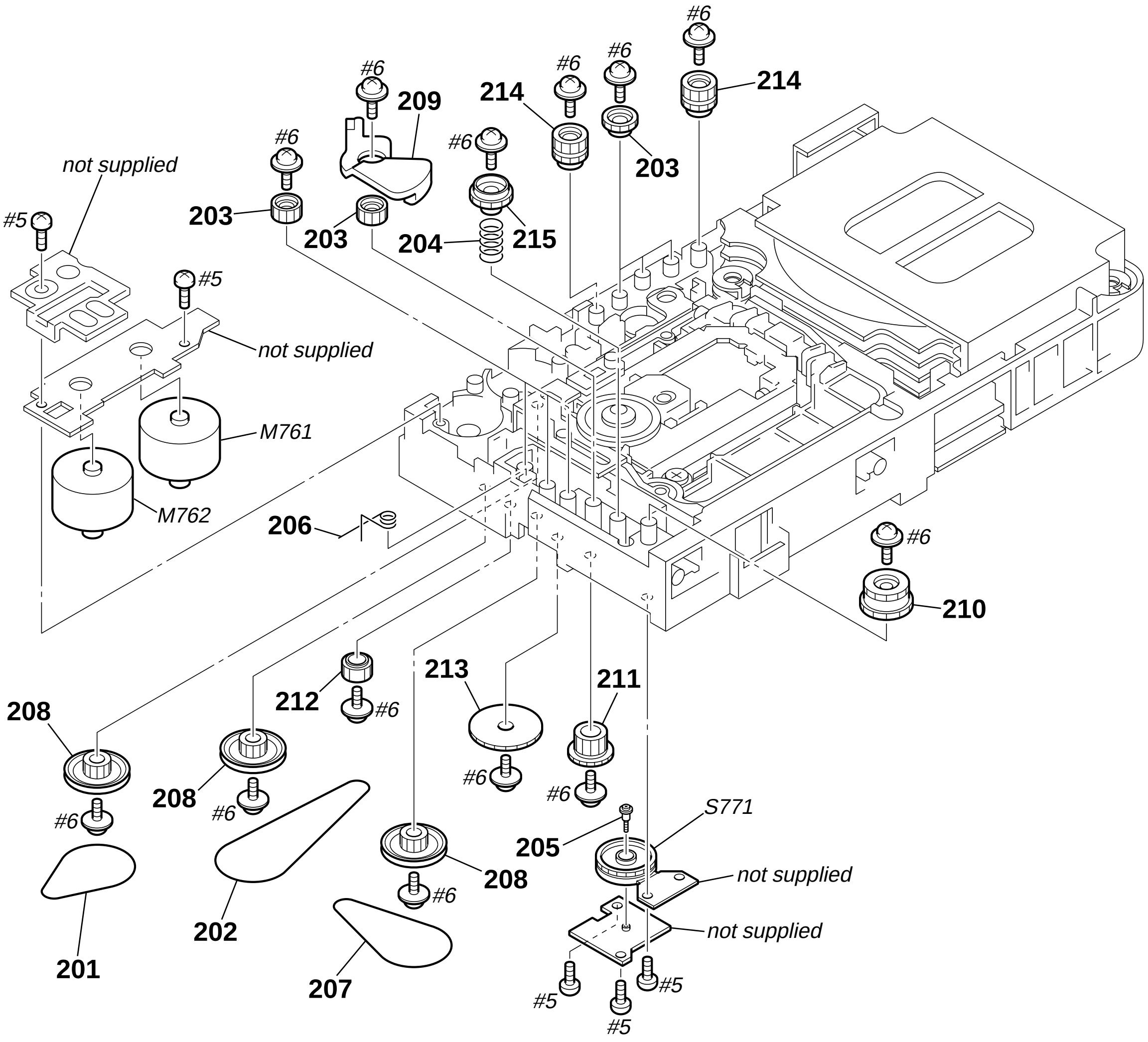
Ref. No.	Part No.	Description	Remark
110	A-1054-641-A	DMB07 BOARD, COMPLETE (E41)	
110	A-4752-761-A	DMB07 BOARD, COMPLETE (150: US, CND/250)	
111	A-1052-864-A	MAIN BOARD, COMPLETE (150: MX)	
111	A-1053-127-A	MAIN BOARD, COMPLETE (AUS)	
111	A-1054-637-A	MAIN BOARD, COMPLETE (E41)	
111	A-1062-037-A	MAIN BOARD, COMPLETE (250: US, CND)	
111	A-1065-470-A	MAIN BOARD, COMPLETE (EA)	
111	A-1065-499-A	MAIN BOARD, COMPLETE (TW, KR)	
111	A-1067-908-A	MAIN BOARD, COMPLETE (250: MX)	
111	A-4752-751-A	MAIN BOARD, COMPLETE (150: US, CND)	
112	1-828-411-11	WIRE (FLAT TYPE) (29 CORE)	
113	3-077-331-01	+BV3 (3-CR)	
114	1-828-371-11	WIRE (FLAT TYPE) (21 CORE)	
115	1-828-349-11	WIRE (FLAT TYPE) (17 CORE)	
116	1-829-212-11	WIRE (FLAT TYPE) (15 CORE)	
117	1-962-869-11	WIRE (FLAT TYPE) (5 CORE)	
118	1-828-954-11	WIRE (FLAT TYPE) (9 CORE)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	

3-5. CD MECHANISM SECTION-1 (CDM81A-DVBU27)



Ref. No.	Part No.	Description	Remark
151	4-251-849-01	LEVER (SW2)	
152	4-251-991-01	SPRING (SW2), TORSION	
153	4-251-860-01	LEVER (LOCK)	
154	4-251-867-01	SPRING (LOCK), TORSION	
155	4-251-828-01	TRAY (MAIN)	
156	4-252-533-11	PANEL, LOADING	
157	4-251-857-01	COVER (R)	
158	4-251-830-01	SLIDER (ST)	
159	4-251-858-01	COVER (L)	
160	4-251-829-02	TRAY (SUB)	
161	X-4954-450-1	PULLEY (240) ASSY	
162	3-053-844-01	YOKE	
163	4-251-821-02	BRACKET (TOP)	
164	4-233-594-01	PULLEY (B) (DVD), CHUCKING	
165	4-251-824-01	LIFTER	
166	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
167	4-251-822-01	JOINT (LIFTER)	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#7	7-685-102-19	SCREW +P 2X4 NON-SLIT TYPE 2	

3-6. CD MECHANISM SECTION-2 (CDM81A-DVBU27)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#6
#6
#6
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209
#6
#6
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not supplied
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203
204
215
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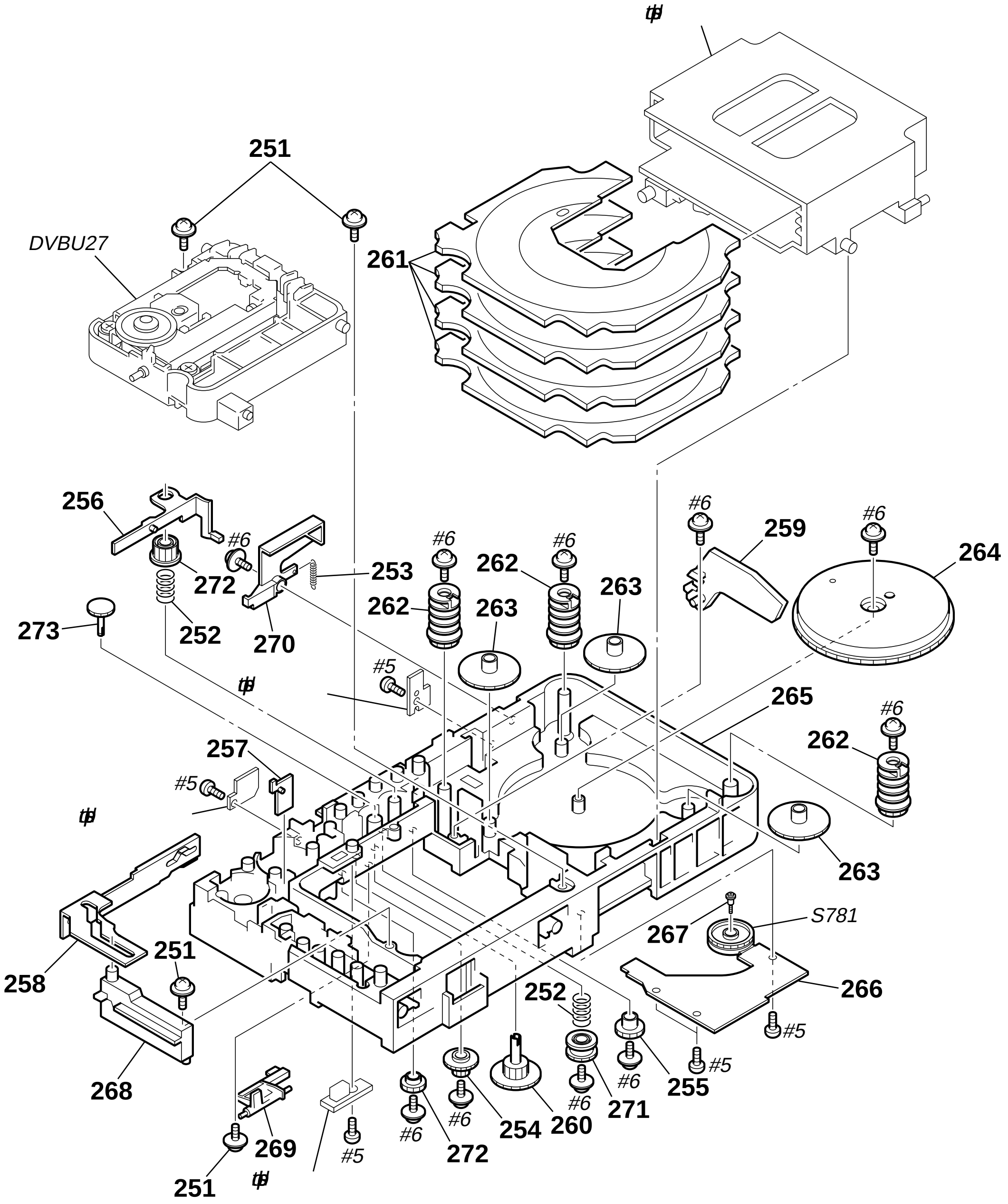
M761
M762
206
#6
210
213
211
208
212
#6
#6
#6
208
#6
S771
205
208
#6
not supplied
not supplied
202
201
207
#5
#5
#5

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	4-251-870-01	BELT (BU)		211	4-251-856-01	GEAR (BU2)	
202	4-251-869-01	BELT (MAIN TRAY)		212	4-251-850-01	GEAR (MAIN TRAY 1)	
203	4-251-841-01	GEAR (SUB TRAY 1)		213	4-251-854-01	GEAR (BU1)	
204	4-251-873-01	SPRING (MODE), COMPRESSION		214	4-251-842-01	GEAR (SUB TRAY 2)	
205	4-239-618-02	SCREW (+PWH, 2X6), STEP TAPPING		215	4-251-851-01	GEAR (MAIN TRAY 2)	
206	4-251-872-01	SPRING (LEVER), TORSION		M761	A-4713-174-A	MOTOR (81) ASSY (LD/ST MOTOR)	
207	4-251-868-01	BELT (SUB TRAY)		M762	A-4713-174-A	MOTOR (81) ASSY (BU U/D MOTOR)	
208	4-251-853-01	PULLEY (BU)		S771	1-478-552-11	ENCODER, ROTARY (MD)	
209	4-251-834-01	LEVER (MAIN TRAY)		#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
210	4-251-852-01	GEAR (MAIN TRAY 3)		#6	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

3-7. CD MECHANISM SECTION-3 (CDM81A-DVBU27)


251
DVBU27
261
256
#6
272
253
262
263
#6
259
#6
264
273
252
270
#5
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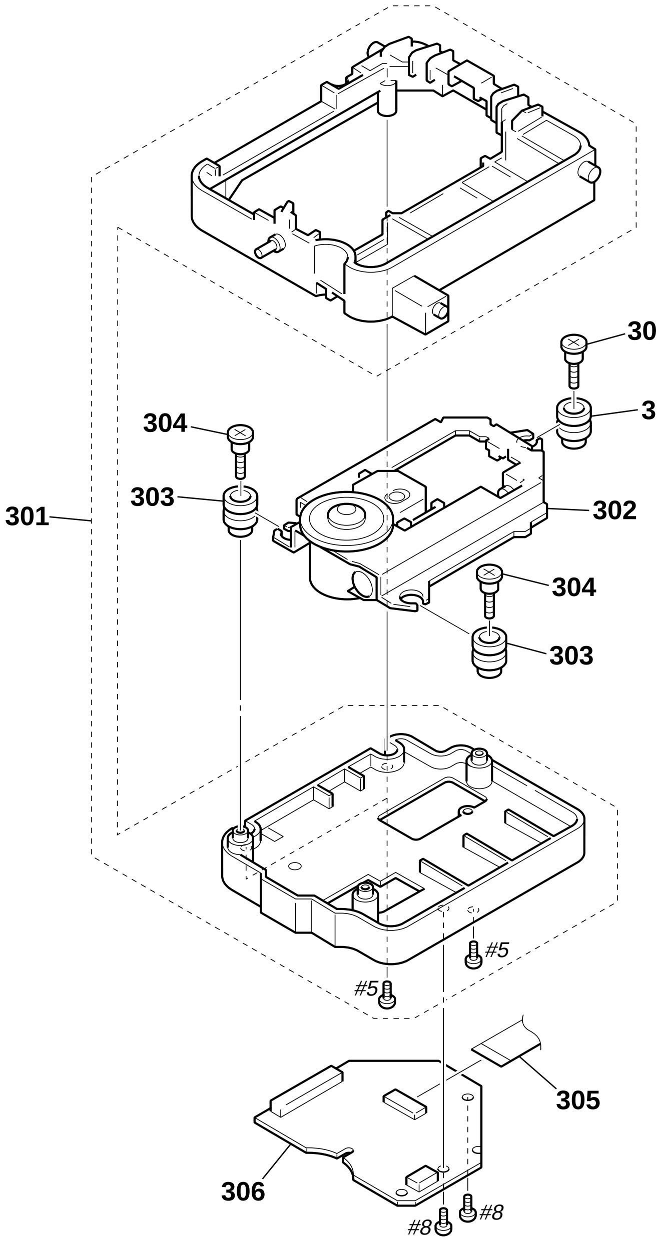
#6
262
257
#5
263
S781
267
258
251
252
266
#5
268
#5
#6
255
#6
271
260
254
#6
272
#6
269
#5
251

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING		264	4-251-838-01	GEAR (STOCKER 3)	
252	4-251-873-01	SPRING (MODE), COMPRESSION		265	4-251-823-01	CHASSIS (CDM81)	
253	4-251-874-02	SPRING (SW), TENSION		266	A-4750-232-A	TRANSLATION BOARD, COMPLETE	
254	4-251-844-01	GEAR (SS2)		267	4-239-618-02	SCREW (+PWH, 2X6), STEP TAPPING	
255	4-251-835-01	GEAR (STOCKER 1)		268	4-251-825-01	CAM (BU)	
256	4-251-833-01	LEVER (SUB TRAY)		269	4-251-832-01	LEVER (STOCKER)	
257	4-251-843-01	LEVER (RELEASE)		270	4-251-861-01	LEVER (SW)	
258	4-251-831-02	LEVER (MODE)		271	4-251-839-01	GEAR (STOCKER 4)	
259	4-251-862-01	SHUTTER (TRAY)		272	4-251-840-01	GEAR (SUB TRAY)	
260	4-251-845-01	GEAR (SS3)		273	4-251-847-01	GEAR (SS4)	
261	4-251-829-02	TRAY (SUB)		S781	1-478-551-11	ENCODER, ROTARY (ST U/D ENCODER)	
262	4-251-827-01	CAM (STOCKER)		#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
263	4-251-836-01	GEAR (STOCKER 2)		#6	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

3-8. BASE UNIT SECTION (DVBU27)



Ref. No.	Part No.	Description	Remark
301	X-4956-103-1	HOLDER (DBU1) ASSY	
⚠302	A-4713-410-A	OPTICAL PICK-UP (DBU-1)	
303	3-057-023-11	INSULATOR (RB)	
304	4-981-923-01	SCREW (M), STEP	
305	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)	
306	A-4728-690-A	RF BOARD, COMPLETE	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#8	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. ., uPA. . : µPA. .,
  uPB. . : µPB. ., uPC. . : µPC. .,
  uPD. . : µPD. .
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  E41 : 230V AC Area in E model
  EA : Saudi Arabia model
  KR : Korea model
  MX : Mexican model
  TW : Taiwan modell

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
	A-1052-860-A	AMP BOARD, COMPLETE (150: MX)			
	A-1053-123-A	AMP BOARD, COMPLETE (TW, EA, AUS)			
	A-1054-633-A	AMP BOARD, COMPLETE (E41)			
	A-1062-134-A	AMP BOARD, COMPLETE (250: US, CND)			
	A-1067-906-A	AMP BOARD, COMPLETE (250: MX)			
	A-4752-734-A	AMP BOARD, COMPLETE (150: US, CND, KR)			
		*********************			
		< CAPACITOR >			
C101	1-164-346-11	CERAMIC CHIP	1uF		16V
C102	1-164-346-11	CERAMIC CHIP	1uF		16V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C104	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-164-346-11	CERAMIC CHIP	1uF		16V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C111	1-164-346-11	CERAMIC CHIP	1uF		16V
C112	1-164-346-11	CERAMIC CHIP	1uF		16V
C113	1-164-346-11	CERAMIC CHIP	1uF		16V
C114	1-164-346-11	CERAMIC CHIP	1uF		16V
C115	1-164-346-11	CERAMIC CHIP	1uF		16V
C116	1-164-346-11	CERAMIC CHIP	1uF		16V
C131	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C132	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C134	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C135	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C138	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C141	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C142	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C143	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C144	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C145	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C146	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C148	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C149	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C151	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C152	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C153	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C154	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C155	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C156	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C158	1-126-947-11	ELECT	47uF	20%	35V
C160	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C161	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C162	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C163	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C164	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C165	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C166	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C168	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C171	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C172	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C173	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C174	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C175	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C176	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C178	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C181	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C182	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C183	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C184	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C185	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C186	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C188	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C189	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C190	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C191	1-107-898-11	ELECT	2200uF	20%	35V
C192	1-107-898-11	ELECT	2200uF	20%	35V
C193	1-107-898-11	ELECT	2200uF	20%	35V
C194	1-107-898-11	ELECT	2200uF	20%	35V
C195	1-107-898-11	ELECT	2200uF	20%	35V
					(EXCEPT 250: MX)
C196	1-110-617-51	ELECT	2200uF	20%	50V
					(EXCEPT 250: MX)
C198	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C199	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C200	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C201	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C202	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C203	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C204	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C205	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C206	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V

AMP

Ref. No.	Part No.	Description			Remark
C207	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C208	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C209	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C210	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C211	1-136-177-00	FILM	1uF	5%	50V
C212	1-136-177-00	FILM	1uF	5%	50V
C213	1-136-177-00	FILM	1uF	5%	50V
C214	1-136-177-00	FILM	1uF	5%	50V
C215	1-136-177-00	FILM	1uF	5%	50V
C216	1-136-177-00	FILM	1uF	5%	50V
C221	1-136-177-00	FILM	1uF	5%	50V
C222	1-136-177-00	FILM	1uF	5%	50V
C223	1-136-177-00	FILM	1uF	5%	50V
C224	1-136-177-00	FILM	1uF	5%	50V
C225	1-136-177-00	FILM	1uF	5%	50V
C226	1-136-177-00	FILM	1uF	5%	50V
C248	1-126-947-11	ELECT	47uF	20%	35V
C251	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C252	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C253	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C254	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C255	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C256	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C261	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C262	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C263	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C264	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C265	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C266	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C271	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C272	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C275	1-162-294-31	CERAMIC	0.001uF	10%	50V
C276	1-162-294-31	CERAMIC	0.001uF	10%	50V
C277	1-162-294-31	CERAMIC	0.001uF	10%	50V
C278	1-162-294-31	CERAMIC	0.001uF	10%	50V
C281	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C282	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C283	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C284	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C285	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C286	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C287	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C288	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C289	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C290	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C291	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C292	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C301	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C304	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C305	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C306	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C309	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C310	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C311	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C312	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C313	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C314	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C315	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C316	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C319	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C320	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C321	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C322	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C323	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C324	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C325	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C326	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C327	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C328	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C329	1-126-947-11	ELECT	47uF	20%	35V
C330	1-126-947-11	ELECT	47uF	20%	35V
C331	1-126-947-11	ELECT	47uF	20%	35V
C332	1-126-947-11	ELECT	47uF	20%	35V
C333	1-126-947-11	ELECT	47uF	20%	35V
C334	1-126-947-11	ELECT	47uF	20%	35V
C335	1-126-947-11	ELECT	47uF	20%	35V
C336	1-126-947-11	ELECT	47uF	20%	35V
C337	1-126-947-11	ELECT	47uF	20%	35V
C350	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C351	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C352	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C353	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C354	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C355	1-126-933-11	ELECT	100uF	20%	16V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C358	1-126-925-91	ELECT	470uF	20%	10V
C359	1-126-925-91	ELECT	470uF	20%	10V
C360	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C361	1-126-947-11	ELECT	47uF	20%	35V
C362	1-104-658-91	ELECT	100uF	20%	10V
C363	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C366	1-126-934-11	ELECT	220uF	20%	16V
C367	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C368	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C370	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C371	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C372	1-126-960-11	ELECT	1uF	20%	50V
C374	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C375	1-126-933-11	ELECT	100uF	20%	16V
C377	1-126-964-11	ELECT	10uF	20%	50V
C380	1-104-662-91	ELECT	22uF	20%	25V
C381	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C382	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C383	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C384	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C385	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C391	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C392	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C393	1-164-505-11	CERAMIC CHIP	2.2uF		16V

Ref. No.	Part No.	Description			Remark
C394	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C395	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C396	1-117-370-11	CERAMIC CHIP	10uF		10V
C402	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C403	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C404	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C405	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C406	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
		< CONNECTOR >			
* CN300	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CN301	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P			
CN302	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
CN306	1-691-766-21	PLUG (MICRO CONNECTOR) 4P			
CN307	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
* CN313	1-564-243-11	PIN, CONNECTOR (3.96mm PITCH) 6P			
		< DIODE >			
D101	6-500-260-01	DIODE	P6SMB39AT3		
D102	6-500-260-01	DIODE	P6SMB39AT3		
D103	6-500-260-01	DIODE	P6SMB39AT3		
D104	6-500-260-01	DIODE	P6SMB39AT3		
D105	6-500-260-01	DIODE	P6SMB39AT3		
D106	6-500-260-01	DIODE	P6SMB39AT3		
D201	6-500-260-01	DIODE	P6SMB39AT3		
D202	6-500-260-01	DIODE	P6SMB39AT3		
D203	6-500-260-01	DIODE	P6SMB39AT3		
D204	6-500-260-01	DIODE	P6SMB39AT3		
D205	6-500-260-01	DIODE	P6SMB39AT3		
D206	6-500-260-01	DIODE	P6SMB39AT3		
D208	8-719-421-15	DIODE	MA8027-L		
D303	8-719-988-61	DIODE	1SS355TE-17		
D304	8-719-988-61	DIODE	1SS355TE-17		
		< FERRITE BEAD >			
FB301	1-469-760-21	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC101	6-704-802-01	IC	CXD9774M		
IC102	6-704-802-01	IC	CXD9774M		
IC103	6-704-802-01	IC	CXD9774M		
IC104	6-704-802-01	IC	CXD9774M		
IC105	6-704-802-01	IC	CXD9774M		
IC106	6-704-802-01	IC	CXD9774M		
IC108	6-705-979-01	IC	CXD9788AR		
IC109	6-705-979-01	IC	CXD9788AR		
IC110	6-705-979-01	IC	CXD9788AR		
IC301	6-705-720-01	IC	RC4580IDR		
IC303	6-702-300-01	IC	TK11118CSCL-G		
IC305	6-701-189-01	IC	MC74VHC1GU04DFT1		
		< SHORT >			
JR401	1-216-864-11	SHORT CHIP	0		
JR402	1-216-864-11	SHORT CHIP	0		
JR403	1-216-864-11	SHORT CHIP	0		
JR404	1-216-864-11	SHORT CHIP	0		
JR405	1-216-864-11	SHORT CHIP	0		
JR406	1-216-864-11	SHORT CHIP	0		
JR407	1-216-864-11	SHORT CHIP	0		
JR408	1-216-864-11	SHORT CHIP	0		
JR409	1-216-864-11	SHORT CHIP	0		
JR411	1-216-864-11	SHORT CHIP	0		
JR412	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L121	1-456-680-11	INDUCTOR	10uH		
L122	1-456-680-11	INDUCTOR	10uH		
L123	1-456-680-11	INDUCTOR	10uH		
L124	1-456-680-11	INDUCTOR	10uH		
L125	1-456-680-11	INDUCTOR	10uH		
L126	1-456-680-11	INDUCTOR	10uH		
L131	1-456-680-11	INDUCTOR	10uH		
L132	1-456-680-11	INDUCTOR	10uH		
L133	1-456-680-11	INDUCTOR	10uH		
L134	1-456-680-11	INDUCTOR	10uH		
L135	1-456-680-11	INDUCTOR	10uH		
L136	1-456-680-11	INDUCTOR	10uH		
L302	1-412-939-11	INDUCTOR	1uH		
		< TRANSISTOR >			
Q101	8-729-602-36	TRANSISTOR	2SA1602-F		
Q102	8-729-602-36	TRANSISTOR	2SA1602-F		
Q103	8-729-602-36	TRANSISTOR	2SA1602-F		
Q104	8-729-602-36	TRANSISTOR	2SA1602-F		
Q105	8-729-602-36	TRANSISTOR	2SA1602-F		
Q106	8-729-602-36	TRANSISTOR	2SA1602-F		
Q107	8-729-602-36	TRANSISTOR	2SA1602-F		
Q108	8-729-602-36	TRANSISTOR	2SA1602-F		
Q109	8-729-602-36	TRANSISTOR	2SA1602-F		
Q110	8-729-602-36	TRANSISTOR	2SA1602-F		
Q111	8-729-602-36	TRANSISTOR	2SA1602-F		
Q112	8-729-602-36	TRANSISTOR	2SA1602-F		
Q301	8-729-034-51	TRANSISTOR	KTC3875		
Q303	8-729-801-84	TRANSISTOR	2SB1013-4		
Q304	8-729-038-68	TRANSISTOR	KRC103S		
		< RESISTOR >			
R108	1-216-837-11	METAL CHIP	22K	5%	1/10W
R109	1-216-837-11	METAL CHIP	22K	5%	1/10W
R110	1-216-837-11	METAL CHIP	22K	5%	1/10W
R111	1-216-837-11	METAL CHIP	22K	5%	1/10W
R112	1-216-837-11	METAL CHIP	22K	5%	1/10W
R113	1-216-837-11	METAL CHIP	22K	5%	1/10W
R114	1-216-837-11	METAL CHIP	22K	5%	1/10W
R115	1-216-837-11	METAL CHIP	22K	5%	1/10W
R116	1-216-837-11	METAL CHIP	22K	5%	1/10W
R117	1-216-837-11	METAL CHIP	22K	5%	1/10W
R118	1-216-837-11	METAL CHIP	22K	5%	1/10W
R119	1-216-837-11	METAL CHIP	22K	5%	1/10W
R129	1-216-809-11	METAL CHIP	100	5%	1/10W
R131	1-216-864-11	SHORT CHIP	0		
R132	1-216-864-11	SHORT CHIP	0		
R133	1-216-864-11	SHORT CHIP	0		
R134	1-216-864-11	SHORT CHIP	0		
R135	1-216-864-11	SHORT CHIP	0		

AMP

Ref. No.	Part No.	Description			Remark
R136	1-216-864-11	SHORT CHIP	0		
R139	1-216-864-11	SHORT CHIP	0		
R141	1-216-864-11	SHORT CHIP	0		
R142	1-216-864-11	SHORT CHIP	0		
R143	1-216-864-11	SHORT CHIP	0		
R144	1-216-864-11	SHORT CHIP	0		
R145	1-216-864-11	SHORT CHIP	0		
R146	1-216-864-11	SHORT CHIP	0		
R151	1-216-864-11	SHORT CHIP	0		
R152	1-216-864-11	SHORT CHIP	0		
R153	1-216-864-11	SHORT CHIP	0		
R154	1-216-864-11	SHORT CHIP	0		
R155	1-216-864-11	SHORT CHIP	0		
R156	1-216-864-11	SHORT CHIP	0		
R161	1-216-864-11	SHORT CHIP	0		
R162	1-216-864-11	SHORT CHIP	0		
R163	1-216-864-11	SHORT CHIP	0		
R164	1-216-864-11	SHORT CHIP	0		
R165	1-216-864-11	SHORT CHIP	0		
R166	1-216-864-11	SHORT CHIP	0		
R171	1-216-864-11	SHORT CHIP	0		
R172	1-216-864-11	SHORT CHIP	0		
R173	1-216-864-11	SHORT CHIP	0		
R174	1-216-864-11	SHORT CHIP	0		
R175	1-216-864-11	SHORT CHIP	0		
R176	1-216-864-11	SHORT CHIP	0		
R191	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R192	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R193	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R194	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R195	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R196	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R201	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R202	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R203	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R204	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R205	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R206	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R211	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R212	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R213	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R214	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R215	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R216	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R221	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R222	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R223	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R224	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R225	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R226	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R229	1-216-809-11	METAL CHIP	100	5%	1/10W
R231	1-216-809-11	METAL CHIP	100	5%	1/10W
R233	1-216-809-11	METAL CHIP	100	5%	1/10W
R235	1-216-809-11	METAL CHIP	100	5%	1/10W
R237	1-216-809-11	METAL CHIP	100	5%	1/10W
R241	1-216-809-11	METAL CHIP	100	5%	1/10W
R242	1-216-809-11	METAL CHIP	100	5%	1/10W
R243	1-216-809-11	METAL CHIP	100	5%	1/10W
R244	1-216-809-11	METAL CHIP	100	5%	1/10W
R245	1-216-809-11	METAL CHIP	100	5%	1/10W
R246	1-216-809-11	METAL CHIP	100	5%	1/10W
R300	1-216-817-11	METAL CHIP	470	5%	1/10W
R302	1-216-817-11	METAL CHIP	470	5%	1/10W
R303	1-216-817-11	METAL CHIP	470	5%	1/10W
R304	1-216-817-11	METAL CHIP	470	5%	1/10W
R305	1-216-817-11	METAL CHIP	470	5%	1/10W
R306	1-216-817-11	METAL CHIP	470	5%	1/10W
R308	1-216-817-11	METAL CHIP	470	5%	1/10W
R309	1-216-864-11	SHORT CHIP	0		
R310	1-216-809-11	METAL CHIP	100	5%	1/10W
R311	1-216-809-11	METAL CHIP	100	5%	1/10W
R312	1-216-809-11	METAL CHIP	100	5%	1/10W
R313	1-216-809-11	METAL CHIP	100	5%	1/10W
R314	1-216-809-11	METAL CHIP	100	5%	1/10W
R315	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R316	1-216-817-11	METAL CHIP	470	5%	1/10W
R317	1-216-817-11	METAL CHIP	470	5%	1/10W
R318	1-216-817-11	METAL CHIP	470	5%	1/10W
R319	1-216-833-11	METAL CHIP	10K	5%	1/10W
R320	1-216-864-11	SHORT CHIP	0		
R321	1-216-864-11	SHORT CHIP	0		
R322	1-216-833-11	METAL CHIP	10K	5%	1/10W
R323	1-216-864-11	SHORT CHIP	0		
R324	1-216-864-11	SHORT CHIP	0		
R325	1-216-864-11	SHORT CHIP	0		
R326	1-216-864-11	SHORT CHIP	0		
R327	1-216-864-11	SHORT CHIP	0		
R328	1-216-864-11	SHORT CHIP	0		
R329	1-216-864-11	SHORT CHIP	0		
R330	1-216-837-11	METAL CHIP	22K	5%	1/10W
R331	1-216-837-11	METAL CHIP	22K	5%	1/10W
R332	1-216-837-11	METAL CHIP	22K	5%	1/10W
R333	1-216-837-11	METAL CHIP	22K	5%	1/10W
R334	1-216-837-11	METAL CHIP	22K	5%	1/10W
R335	1-216-837-11	METAL CHIP	22K	5%	1/10W
R336	1-216-837-11	METAL CHIP	22K	5%	1/10W
R337	1-216-837-11	METAL CHIP	22K	5%	1/10W
R338	1-218-725-11	METAL CHIP	24K	0.5%	1/10W
R339	1-218-725-11	METAL CHIP	24K	0.5%	1/10W
R340	1-216-839-11	METAL CHIP	33K	5%	1/10W
R341	1-216-839-11	METAL CHIP	33K	5%	1/10W
R342	1-216-864-11	SHORT CHIP	0		
R343	1-216-864-11	SHORT CHIP	0		
R344	1-216-817-11	METAL CHIP	470	5%	1/10W
R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R346	1-216-817-11	METAL CHIP	470	5%	1/10W
R347	1-216-833-11	METAL CHIP	10K	5%	1/10W
R348	1-216-817-11	METAL CHIP	470	5%	1/10W
R349	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R350	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R351	1-216-817-11	METAL CHIP	470	5%	1/10W
R361	1-216-845-11	METAL CHIP	100K	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W
R363	1-216-845-11	METAL CHIP	100K	5%	1/10W
R364	1-216-845-11	METAL CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R365	1-216-845-11	METAL CHIP	100K	5%	1/10W
R366	1-216-845-11	METAL CHIP	100K	5%	1/10W
R371	1-216-818-11	METAL CHIP	560	5%	1/10W
R372	1-216-818-11	METAL CHIP	560	5%	1/10W
R373	1-216-818-11	METAL CHIP	560	5%	1/10W
R374	1-216-818-11	METAL CHIP	560	5%	1/10W
R375	1-216-818-11	METAL CHIP	560	5%	1/10W
R376	1-216-818-11	METAL CHIP	560	5%	1/10W
R377	1-216-818-11	METAL CHIP	560	5%	1/10W
R378	1-216-818-11	METAL CHIP	560	5%	1/10W
R379	1-216-818-11	METAL CHIP	560	5%	1/10W
R380	1-216-818-11	METAL CHIP	560	5%	1/10W
R381	1-216-818-11	METAL CHIP	560	5%	1/10W
R382	1-216-818-11	METAL CHIP	560	5%	1/10W
R383	1-216-818-11	METAL CHIP	560	5%	1/10W
R384	1-216-818-11	METAL CHIP	560	5%	1/10W
R393	1-216-801-11	METAL CHIP	22	5%	1/10W
R394	1-216-857-11	METAL CHIP	1M	5%	1/10W
R395	1-216-845-11	METAL CHIP	100K	5%	1/10W
R396	1-216-809-11	METAL CHIP	100	5%	1/10W
R400	1-216-845-11	METAL CHIP	100K	5%	1/10W
R401	1-216-845-11	METAL CHIP	100K	5%	1/10W
R402	1-216-845-11	METAL CHIP	100K	5%	1/10W
R403	1-216-845-11	METAL CHIP	100K	5%	1/10W
R404	1-216-845-11	METAL CHIP	100K	5%	1/10W
R405	1-216-845-11	METAL CHIP	100K	5%	1/10W
R406	1-216-845-11	METAL CHIP	100K	5%	1/10W
R407	1-216-845-11	METAL CHIP	100K	5%	1/10W
R408	1-216-845-11	METAL CHIP	100K	5%	1/10W
R409	1-216-845-11	METAL CHIP	100K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-845-11	METAL CHIP	100K	5%	1/10W
R412	1-216-845-11	METAL CHIP	100K	5%	1/10W
R425	1-216-819-11	METAL CHIP	680	5%	1/10W
R426	1-216-819-11	METAL CHIP	680	5%	1/10W
R427	1-216-818-11	METAL CHIP	560	5%	1/10W
R428	1-216-841-11	METAL CHIP	47K	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-845-11	METAL CHIP	100K	5%	1/10W
R450	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
R453	1-216-833-11	METAL CHIP	10K	5%	1/10W
R456	1-216-833-11	METAL CHIP	10K	5%	1/10W
R457	1-216-833-11	METAL CHIP	10K	5%	1/10W
R458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R459	1-216-833-11	METAL CHIP	10K	5%	1/10W
R460	1-216-833-11	METAL CHIP	10K	5%	1/10W
R461	1-216-833-11	METAL CHIP	10K	5%	1/10W
R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-833-11	METAL CHIP	10K	5%	1/10W
R482	1-216-833-11	METAL CHIP	10K	5%	1/10W
R483	1-216-833-11	METAL CHIP	10K	5%	1/10W
R484	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R487	1-216-833-11	METAL CHIP	10K	5%	1/10W
R488	1-216-833-11	METAL CHIP	10K	5%	1/10W
R489	1-216-833-11	METAL CHIP	10K	5%	1/10W
R490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-833-11	METAL CHIP	10K	5%	1/10W
R495	1-216-833-11	METAL CHIP	10K	5%	1/10W
R496	1-216-833-11	METAL CHIP	10K	5%	1/10W
R497	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< VIBRATOR >			
X450	1-795-660-21	QUARTZ CRYSTAL UNIT			

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AMP RETAINER BOARD
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Ref. No.	Part No.	Description
	A-1052-868-A	DMB07 BOARD, COMPLETE (150: MX)
	A-1053-135-A	DMB07 BOARD, COMPLETE (TW, EA, KR, AUS)
	A-1054-641-A	DMB07 BOARD, COMPLETE (E41)
	A-4752-761-A	DMB07 BOARD, COMPLETE (150: US, CND/250)

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< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C101	1-126-246-11	ELECT CHIP	220uF	20%	4V
C151	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C201	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C202	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C203	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C204	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C205	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C213	1-126-209-11	ELECT CHIP	100uF	20%	4V
C214	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C215	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C216	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C218	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C220	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C226	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C227	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C229	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C230	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C231	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C232	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C233	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C234	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C235	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C236	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C237	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C238	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C239	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C240	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C241	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C242	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C243	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V

DMB07

Ref. No.	Part No.	Description			Remark
C244	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C245	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C246	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C247	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C248	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C249	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C250	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C251	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C252	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C253	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C254	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C255	1-117-370-11	CERAMIC CHIP	10uF		10V
C256	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C257	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C258	1-117-370-11	CERAMIC CHIP	10uF		10V
C259	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C260	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C261	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C262	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C263	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C264	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C265	1-117-370-11	CERAMIC CHIP	10uF		10V
C266	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C267	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C268	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C269	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C270	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C271	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C272	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C273	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C274	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C275	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C276	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C277	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C278	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C279	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C280	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C281	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C282	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C283	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C284	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C286	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C287	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C290	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C291	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C352	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C355	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C356	1-126-193-11	ELECT CHIP	1uF	20%	50V
C357	1-126-193-11	ELECT CHIP	1uF	20%	50V
C363	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C364	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C365	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C366	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C367	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C368	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C501	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C503	1-127-772-81	CERAMIC CHIP	33000PF	10%	10V

Ref. No.	Part No.	Description			Remark
C504	1-127-772-81	CERAMIC CHIP	33000PF	10%	10V
C506	1-164-934-11	CERAMIC CHIP	330PF	10%	50V
C507	1-117-370-11	CERAMIC CHIP	10uF		10V
C508	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C509	1-164-934-11	CERAMIC CHIP	330PF	10%	50V
C510	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C511	1-164-933-11	CERAMIC CHIP	220PF	10%	50V
C512	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C513	1-117-370-11	CERAMIC CHIP	10uF		10V
C514	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C515	1-164-933-11	CERAMIC CHIP	220PF	10%	50V
C516	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C517	1-117-370-11	CERAMIC CHIP	10uF		10V
C518	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C519	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C521	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C522	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C523	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C524	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C525	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C526	1-126-395-11	ELECT CHIP	22uF	20%	16V
C527	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C528	1-126-395-11	ELECT CHIP	22uF	20%	16V
C529	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C530	1-117-370-11	CERAMIC CHIP	10uF		10V
C531	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C532	1-117-370-11	CERAMIC CHIP	10uF		10V
C533	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C534	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C535	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C540	1-117-370-11	CERAMIC CHIP	10uF		10V
C543	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C544	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C545	1-117-370-11	CERAMIC CHIP	10uF		10V
C547	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
C548	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C551	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C552	1-216-295-91	SHORT CHIP	0		
C553	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C556	1-117-370-11	CERAMIC CHIP	10uF		10V
C558	1-126-209-11	ELECT CHIP	100uF	20%	4V
C559	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C560	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C561	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C563	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C565	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C567	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C568	1-117-370-11	CERAMIC CHIP	10uF		10V
C569	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C570	1-117-370-11	CERAMIC CHIP	10uF		10V
C573	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C588	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C589	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C590	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C592	1-124-779-00	ELECT CHIP	10uF	20%	16V
C701	1-126-209-11	ELECT CHIP	100uF	20%	4V
C702	1-117-370-11	CERAMIC CHIP	10uF		10V

Ref. No.	Part No.	Description			Remark
C703	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C705	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C706	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C708	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C709	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C711	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C712	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C713	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C714	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C715	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C716	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C717	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C718	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C720	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C721	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C722	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C723	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C724	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C725	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C726	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C727	1-117-370-11	CERAMIC CHIP	10uF		10V
C728	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C729	1-117-370-11	CERAMIC CHIP	10uF		10V
C730	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C733	1-117-370-11	CERAMIC CHIP	10uF		10V
C734	1-117-370-11	CERAMIC CHIP	10uF		10V
C740	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C741	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C742	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C743	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C744	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C745	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C752	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C760	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C761	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C762	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C763	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C764	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C765	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C766	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C767	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C768	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C769	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C770	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C771	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C772	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C773	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C774	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C775	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C776	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C777	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C778	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C779	1-117-370-11	CERAMIC CHIP	10uF		10V
C780	1-117-370-11	CERAMIC CHIP	10uF		10V
C781	1-126-246-11	ELECT CHIP	220uF	20%	4V
C782	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C783	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C901	1-126-209-11	ELECT CHIP	100uF	20%	4V
C902	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C903	1-126-209-11	ELECT CHIP	100uF	20%	4V
C904	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C905	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C906	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C907	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C908	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C909	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C910	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C913	1-127-772-81	CERAMIC CHIP	33000PF	10%	10V
C914	1-164-849-11	CERAMIC CHIP	9PF	0.5PF	50V
C915	1-164-847-11	CERAMIC CHIP	7PF	0.5PF	50V
C916	1-126-209-11	ELECT CHIP	100uF	20%	4V
C917	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C918	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C924	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C925	1-126-395-11	ELECT CHIP	22uF	20%	16V
C926	1-126-246-11	ELECT CHIP	220uF	20%	4V
C927	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C928	1-117-370-11	CERAMIC CHIP	10uF		10V
		< CONNECTOR >			
* CN101	1-784-365-31	CONNECTOR, FFC/FPC 5P			
CN102	1-815-954-21	PIN, CONNECTOR (PC BOARD) 13P			
CN105	1-784-374-31	CONNECTOR, FFC/FPC 15P			
CN106	1-784-368-31	CONNECTOR, FFC/FPC 9P			
* CN107	1-784-365-31	CONNECTOR, FFC/FPC 5P			
CN501	1-778-957-11	CONNECTOR, FFC/FPC 29P			
CN901	1-764-177-11	PIN, CONNECTOR (SMD) (1.5mm) 7P			
		< DIODE >			
D202	8-719-988-61	DIODE 1SS355TE-17			
D500	8-719-988-61	DIODE 1SS355TE-17			
D901	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB105	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB902	1-500-284-21	INDUCTOR, FERRITE BEAD			
FB903	1-500-284-21	INDUCTOR, FERRITE BEAD			
		< FILTER >			
FL101	1-234-177-21	FILTER, CHIP EMI			
FL203	1-234-177-21	FILTER, CHIP EMI			
FL204	1-234-177-21	FILTER, CHIP EMI			
FL205	1-234-177-21	FILTER, CHIP EMI			
FL206	1-234-177-21	FILTER, CHIP EMI			
FL352	1-234-177-21	FILTER, CHIP EMI			
FL501	1-234-177-21	FILTER, CHIP EMI			
FL502	1-234-177-21	FILTER, CHIP EMI			
FL701	1-234-177-21	FILTER, CHIP EMI			
FL702	1-234-177-21	FILTER, CHIP EMI			
FL703	1-234-177-21	FILTER, CHIP EMI			
FL705	1-234-177-21	FILTER, CHIP EMI			
FL706	1-234-177-21	FILTER, CHIP EMI			
FL901	1-234-177-21	FILTER, CHIP EMI			
FL903	1-234-177-21	FILTER, CHIP EMI			
FL908	1-234-177-21	FILTER, CHIP EMI			

DMB07

Ref. No.	Part No.	Description			Remark
		< IC >			
IC111	6-550-554-01	TRANSISTOR	UM6K1NL02TN		
IC203	6-704-069-01	IC MT48LC4M32B2P-6-Y15W			
* IC204	6-703-671-01	IC BR9040F-WE2			
IC205	6-804-531-01	IC MR27V3202F-12STP04B9			
IC207	6-704-630-01	IC ZIVA5X-C2F			
IC211	6-700-398-01	IC uPC2918T-E1			
IC231	8-759-549-21	IC SN74LV573APWR			
IC232	8-759-549-21	IC SN74LV573APWR			
IC233	8-759-549-21	IC SN74LV573APWR			
IC256	8-759-549-21	IC SN74LV573APWR			
IC258	8-759-549-21	IC SN74LV573APWR			
IC259	8-759-549-21	IC SN74LV573APWR			
IC352	8-759-560-56	IC PCM1800E/2K			
IC501	6-702-157-01	IC FAN8035L			
IC502	8-759-583-47	IC uPC2933T-E2			
IC503	8-759-058-43	IC NJM3404AV			
IC509	8-752-408-73	IC CXD3068Q			
IC701	6-703-552-01	IC TMC57929PGF-RDP			
IC703	8-759-058-43	IC NJM3404AV			
IC706	6-705-876-01	IC M51V18165M-60TS-KR1			
IC901	8-753-224-50	IC CXP973064-243R			
IC902	8-759-649-48	IC SN74AHC1G32DCKR			
IC903	6-704-004-01	IC BR24L16F-WE2			
IC904	6-704-753-01	IC SN74AHC2G74HDCUR			
IC906	6-700-407-01	IC SM8707GV-G-E2			
IC907	8-759-583-47	IC uPC2933T-E2			
		< SHORT >			
JW801	1-218-990-11	SHORT CHIP	0		
JW802	1-218-990-11	SHORT CHIP	0		
JW803	1-218-990-11	SHORT CHIP	0		
JW804	1-218-990-11	SHORT CHIP	0		
JW805	1-218-990-11	SHORT CHIP	0		
JW806	1-218-990-11	SHORT CHIP	0		
		< COIL >			
L103	1-216-295-91	SHORT CHIP	0		
L501	1-216-295-91	SHORT CHIP	0		
L704	1-412-031-11	INDUCTOR	47uH		
L901	1-412-031-11	INDUCTOR	47uH		
		< TRANSISTOR >			
Q201	8-729-929-26	TRANSISTOR	DTC114TE		
Q202	8-729-929-26	TRANSISTOR	DTC114TE		
Q901	8-729-929-26	TRANSISTOR	DTC114TE		
		< RESISTOR >			
R10	1-216-801-11	METAL CHIP	22	5%	1/10W
R11	1-216-801-11	METAL CHIP	22	5%	1/10W
R12	1-216-801-11	METAL CHIP	22	5%	1/10W
R13	1-216-801-11	METAL CHIP	22	5%	1/10W
R14	1-216-801-11	METAL CHIP	22	5%	1/10W
R15	1-216-801-11	METAL CHIP	22	5%	1/10W
R197	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R198	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R201	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R213	1-218-939-11	RES-CHIP	68	5%	1/16W
R215	1-216-864-11	SHORT CHIP	0		
R217	1-216-864-11	SHORT CHIP	0		
R220	1-216-864-11	SHORT CHIP	0		
R221	1-216-864-11	SHORT CHIP	0		
R222	1-216-864-11	SHORT CHIP	0		
R225	1-543-958-22	BEAD, FERRITE (CHIP) (1608)			
R226	1-216-864-11	SHORT CHIP	0		
R227	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R228	1-216-864-11	SHORT CHIP	0		
R230	1-216-803-11	METAL CHIP	33	5%	1/10W
R231	1-216-803-11	METAL CHIP	33	5%	1/10W
R232	1-216-803-11	METAL CHIP	33	5%	1/10W
R234	1-216-833-11	METAL CHIP	10K	5%	1/10W
R240	1-216-841-11	METAL CHIP	47K	5%	1/10W
R241	1-216-864-11	SHORT CHIP	0		
R244	1-216-821-11	METAL CHIP	1K	5%	1/10W
R245	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R246	1-216-833-11	METAL CHIP	10K	5%	1/10W
R247	1-216-821-11	METAL CHIP	1K	5%	1/10W
R248	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R250	1-216-864-11	SHORT CHIP	0		
R251	1-216-864-11	SHORT CHIP	0		
R253	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R254	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R255	1-216-864-11	SHORT CHIP	0		
R257	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R259	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R260	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R261	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R263	1-218-285-11	METAL CHIP	75	5%	1/10W
R264	1-218-285-11	METAL CHIP	75	5%	1/10W
R265	1-218-285-11	METAL CHIP	75	5%	1/10W
R266	1-218-285-11	METAL CHIP	75	5%	1/10W
R267	1-218-285-11	METAL CHIP	75	5%	1/10W
R268	1-543-958-22	BEAD, FERRITE (CHIP) (1608)			
R269	1-216-864-11	SHORT CHIP	0		
R270	1-216-864-11	SHORT CHIP	0		
R271	1-216-809-11	METAL CHIP	100	5%	1/10W
R272	1-216-809-11	METAL CHIP	100	5%	1/10W
R273	1-500-284-21	INDUCTOR, FERRITE BEAD			
R274	1-500-284-21	INDUCTOR, FERRITE BEAD			
R275	1-500-284-21	INDUCTOR, FERRITE BEAD			
R276	1-500-284-21	INDUCTOR, FERRITE BEAD			
R277	1-500-284-21	INDUCTOR, FERRITE BEAD			
R278	1-218-285-11	METAL CHIP	75	5%	1/10W
R279	1-218-285-11	METAL CHIP	75	5%	1/10W
R280	1-218-285-11	METAL CHIP	75	5%	1/10W
R281	1-218-285-11	METAL CHIP	75	5%	1/10W
R282	1-218-285-11	METAL CHIP	75	5%	1/10W
R283	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R284	1-218-829-11	METAL CHIP	180	0.5%	1/10W
R290	1-216-809-11	METAL CHIP	100	5%	1/10W
R291	1-216-809-11	METAL CHIP	100	5%	1/10W
R292	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R293	1-216-864-11	SHORT CHIP	0		
R294	1-216-864-11	SHORT CHIP	0		
R296	1-216-864-11	SHORT CHIP	0		
R299	1-249-416-11	CARBON	820	5%	1/4W
R301	1-216-821-11	METAL CHIP	1K	5%	1/10W
R327	1-216-864-11	SHORT CHIP	0		
R328	1-216-864-11	SHORT CHIP	0		
R329	1-216-864-11	SHORT CHIP	0		
R335	1-216-864-11	SHORT CHIP	0		
R352	1-216-864-11	SHORT CHIP	0		
R353	1-216-864-11	SHORT CHIP	0		
R362	1-216-833-11	METAL CHIP	10K	5%	1/10W
R503	1-216-841-11	METAL CHIP	47K	5%	1/10W
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W
R505	1-216-841-11	METAL CHIP	47K	5%	1/10W
R506	1-216-841-11	METAL CHIP	47K	5%	1/10W
R510	1-216-847-11	METAL CHIP	150K	5%	1/10W
R511	1-216-847-11	METAL CHIP	150K	5%	1/10W
R512	1-216-842-11	METAL CHIP	56K	5%	1/10W
R513	1-216-842-11	METAL CHIP	56K	5%	1/10W
R514	1-216-833-11	METAL CHIP	10K	5%	1/10W
R515	1-216-833-11	METAL CHIP	10K	5%	1/10W
R516	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R517	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R519	1-216-845-11	METAL CHIP	100K	5%	1/10W
R520	1-216-833-11	METAL CHIP	10K	5%	1/10W
R521	1-216-845-11	METAL CHIP	100K	5%	1/10W
R522	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R523	1-216-833-11	METAL CHIP	10K	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W
R525	1-216-833-11	METAL CHIP	10K	5%	1/10W
R527	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R529	1-216-839-11	METAL CHIP	33K	5%	1/10W
R530	1-216-842-11	METAL CHIP	56K	5%	1/10W
R533	1-216-839-11	METAL CHIP	33K	5%	1/10W
R534	1-216-842-11	METAL CHIP	56K	5%	1/10W
R536	1-216-833-11	METAL CHIP	10K	5%	1/10W
R537	1-216-843-11	METAL CHIP	68K	5%	1/10W
R545	1-216-833-11	METAL CHIP	10K	5%	1/10W
R548	1-216-833-11	METAL CHIP	10K	5%	1/10W
R550	1-216-821-11	METAL CHIP	1K	5%	1/10W
R551	1-216-821-11	METAL CHIP	1K	5%	1/10W
R552	1-216-821-11	METAL CHIP	1K	5%	1/10W
R555	1-216-864-11	SHORT CHIP	0		
R558	1-216-841-11	METAL CHIP	47K	5%	1/10W
R559	1-216-821-11	METAL CHIP	1K	5%	1/10W
R560	1-216-821-11	METAL CHIP	1K	5%	1/10W
R561	1-216-821-11	METAL CHIP	1K	5%	1/10W
R562	1-216-821-11	METAL CHIP	1K	5%	1/10W
R563	1-216-821-11	METAL CHIP	1K	5%	1/10W
R564	1-216-821-11	METAL CHIP	1K	5%	1/10W
R565	1-216-821-11	METAL CHIP	1K	5%	1/10W
R566	1-216-833-11	METAL CHIP	10K	5%	1/10W
R567	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R568	1-216-857-11	METAL CHIP	1M	5%	1/10W
R571	1-216-857-11	METAL CHIP	1M	5%	1/10W
R572	1-216-853-11	METAL CHIP	470K	5%	1/10W
R573	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R576	1-216-864-11	SHORT CHIP	0		
R579	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R580	1-216-839-11	METAL CHIP	33K	5%	1/10W
R581	1-216-834-11	METAL CHIP	12K	5%	1/10W
R583	1-216-864-11	SHORT CHIP	0		
R584	1-216-839-11	METAL CHIP	33K	5%	1/10W
R586	1-218-747-11	METAL CHIP	200K	0.5%	1/10W
R587	1-216-864-11	SHORT CHIP	0		
R588	1-216-833-11	METAL CHIP	10K	5%	1/10W
R589	1-216-833-11	METAL CHIP	10K	5%	1/10W
R591	1-216-864-11	SHORT CHIP	0		
R593	1-216-845-11	METAL CHIP	100K	5%	1/10W
R599	1-216-821-11	METAL CHIP	1K	5%	1/10W
R601	1-216-864-11	SHORT CHIP	0		
R694	1-216-833-11	METAL CHIP	10K	5%	1/10W
R698	1-216-864-11	SHORT CHIP	0		
R699	1-216-864-11	SHORT CHIP	0		
R700	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R708	1-216-853-11	METAL CHIP	470K	5%	1/10W
R709	1-216-847-11	METAL CHIP	150K	5%	1/10W
R710	1-216-833-11	METAL CHIP	10K	5%	1/10W
R711	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R712	1-216-833-11	METAL CHIP	10K	5%	1/10W
R713	1-216-833-11	METAL CHIP	10K	5%	1/10W
R714	1-216-833-11	METAL CHIP	10K	5%	1/10W
R715	1-216-833-11	METAL CHIP	10K	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-845-11	METAL CHIP	100K	5%	1/10W
R718	1-216-833-11	METAL CHIP	10K	5%	1/10W
R719	1-216-821-11	METAL CHIP	1K	5%	1/10W
R720	1-216-821-11	METAL CHIP	1K	5%	1/10W
R721	1-216-839-11	METAL CHIP	33K	5%	1/10W
R724	1-216-821-11	METAL CHIP	1K	5%	1/10W
R725	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R726	1-216-845-11	METAL CHIP	100K	5%	1/10W
R727	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R728	1-216-833-11	METAL CHIP	10K	5%	1/10W
R730	1-216-801-11	METAL CHIP	22	5%	1/10W
R731	1-216-801-11	METAL CHIP	22	5%	1/10W
R732	1-216-833-11	METAL CHIP	10K	5%	1/10W
R733	1-216-833-11	METAL CHIP	10K	5%	1/10W
R734	1-216-833-11	METAL CHIP	10K	5%	1/10W
R735	1-216-833-11	METAL CHIP	10K	5%	1/10W
R736	1-216-833-11	METAL CHIP	10K	5%	1/10W
R737	1-216-833-11	METAL CHIP	10K	5%	1/10W
R738	1-216-833-11	METAL CHIP	10K	5%	1/10W
R741	1-216-801-11	METAL CHIP	22	5%	1/10W
R742	1-216-801-11	METAL CHIP	22	5%	1/10W
R743	1-216-801-11	METAL CHIP	22	5%	1/10W
R744	1-216-801-11	METAL CHIP	22	5%	1/10W
R745	1-216-841-11	METAL CHIP	47K	5%	1/10W
R746	1-216-841-11	METAL CHIP	47K	5%	1/10W
R747	1-216-839-11	METAL CHIP	33K	5%	1/10W
R748	1-216-839-11	METAL CHIP	33K	5%	1/10W
R750	1-216-833-11	METAL CHIP	10K	5%	1/10W
R751	1-216-864-11	SHORT CHIP	0		

DMB07 **ENCODER** **FL**

Ref. No.	Part No.	Description			Remark
R758	1-216-864-11	SHORT CHIP	0		
R760	1-216-864-11	SHORT CHIP	0		
R762	1-216-837-11	METAL CHIP	22K	5%	1/10W
R763	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R764	1-216-857-11	METAL CHIP	1M	5%	1/10W
R765	1-216-837-11	METAL CHIP	22K	5%	1/10W
R767	1-216-841-11	METAL CHIP	47K	5%	1/10W
R769	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R776	1-216-864-11	SHORT CHIP	0		
R777	1-216-864-11	SHORT CHIP	0		
R778	1-216-845-11	METAL CHIP	100K	5%	1/10W
R785	1-216-833-11	METAL CHIP	10K	5%	1/10W
R786	1-216-845-11	METAL CHIP	100K	5%	1/10W
R787	1-216-845-11	METAL CHIP	100K	5%	1/10W
R788	1-216-845-11	METAL CHIP	100K	5%	1/10W
R789	1-216-845-11	METAL CHIP	100K	5%	1/10W
R799	1-216-864-11	SHORT CHIP	0		
R805	1-216-864-11	SHORT CHIP	0		
R901	1-216-801-11	METAL CHIP	22	5%	1/10W
R902	1-216-801-11	METAL CHIP	22	5%	1/10W
R904	1-216-833-11	METAL CHIP	10K	5%	1/10W
R905	1-216-801-11	METAL CHIP	22	5%	1/10W
R906	1-216-801-11	METAL CHIP	22	5%	1/10W
R907	1-216-801-11	METAL CHIP	22	5%	1/10W
R908	1-216-833-11	METAL CHIP	10K	5%	1/10W
R911	1-216-833-11	METAL CHIP	10K	5%	1/10W
R912	1-216-833-11	METAL CHIP	10K	5%	1/10W
R913	1-216-833-11	METAL CHIP	10K	5%	1/10W
R915	1-216-809-11	METAL CHIP	100	5%	1/10W
R916	1-216-821-11	METAL CHIP	1K	5%	1/10W
R917	1-216-821-11	METAL CHIP	1K	5%	1/10W
R918	1-216-801-11	METAL CHIP	22	5%	1/10W
R920	1-216-809-11	METAL CHIP	100	5%	1/10W
R921	1-216-809-11	METAL CHIP	100	5%	1/10W
R922	1-216-801-11	METAL CHIP	22	5%	1/10W
R923	1-216-813-11	METAL CHIP	220	5%	1/10W
R925	1-216-809-11	METAL CHIP	100	5%	1/10W
R926	1-216-809-11	METAL CHIP	100	5%	1/10W
R927	1-216-857-11	METAL CHIP	1M	5%	1/10W
R928	1-216-809-11	METAL CHIP	100	5%	1/10W
R929	1-216-809-11	METAL CHIP	100	5%	1/10W
R930	1-216-809-11	METAL CHIP	100	5%	1/10W
R931	1-216-801-11	METAL CHIP	22	5%	1/10W
R932	1-216-801-11	METAL CHIP	22	5%	1/10W
R933	1-216-801-11	METAL CHIP	22	5%	1/10W
R935	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R936	1-216-809-11	METAL CHIP	100	5%	1/10W
R939	1-216-809-11	METAL CHIP	100	5%	1/10W
R940	1-216-809-11	METAL CHIP	100	5%	1/10W
R942	1-216-809-11	METAL CHIP	100	5%	1/10W
R943	1-216-809-11	METAL CHIP	100	5%	1/10W
R958	1-216-801-11	METAL CHIP	22	5%	1/10W
R962	1-216-833-11	METAL CHIP	10K	5%	1/10W
R964	1-216-833-11	METAL CHIP	10K	5%	1/10W
R970	1-216-864-11	SHORT CHIP	0		
R974	1-216-864-11	SHORT CHIP	0		
R975	1-216-833-11	METAL CHIP	10K	5%	1/10W
R978	1-216-833-11	METAL CHIP	10K	5%	1/10W
R984	1-216-833-11	METAL CHIP	10K	5%	1/10W
R988	1-216-864-11	SHORT CHIP	0		
R990	1-216-864-11	SHORT CHIP	0		
R994	1-216-864-11	SHORT CHIP	0		
R995	1-216-864-11	SHORT CHIP	0		
R996	1-216-864-11	SHORT CHIP	0		
R997	1-216-864-11	SHORT CHIP	0		
R998	1-216-864-11	SHORT CHIP	0		
R1000	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9980	1-216-864-11	SHORT CHIP	0		
R9981	1-216-864-11	SHORT CHIP	0		
R9982	1-216-864-11	SHORT CHIP	0		
R9983	1-216-864-11	SHORT CHIP	0		
R9984	1-216-864-11	SHORT CHIP	0		
R9985	1-216-864-11	SHORT CHIP	0		
R9998	1-216-864-11	SHORT CHIP	0		
R9999	1-216-864-11	SHORT CHIP	0		

< VIBRATOR >

Ref. No.	Part No.	Description
X901	1-781-945-21	VIBRATOR, CERAMIC (20MHz)
X902	1-795-630-11	VIBRATOR, CRYSTAL (27MHz)

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ENCODER BOARD
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FL BOARD
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< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C839	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C840	1-126-795-11	ELECT	10uF	20%	50V
C841	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C842	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C843	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C845	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C846	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C848	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C849	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C850	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C851	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C852	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C853	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C854	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C855	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C856	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C857	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C858	1-162-960-11	CERAMIC CHIP	220PF	10%	50V

< CONNECTOR >

Ref. No.	Part No.	Description
CN803	1-568-828-11	CONNECTOR, FFC 9P

< FLUORESCENT INDICATOR >

Ref. No.	Part No.	Description
FL801	1-518-968-11	INDICATOR TUBE, FLUORESCENT

Ref. No.	Part No.	Description			Remark
		< IC >			
IC803	8-759-643-83	IC uPD16315GB-3BS			
		< TRANSISTOR >			
Q814	8-729-034-51	TRANSISTOR	KTC3875		
Q815	8-729-034-51	TRANSISTOR	KTC3875		
		< RESISTOR >			
R853	1-216-809-11	METAL CHIP	100	5%	1/10W
R854	1-216-809-11	METAL CHIP	100	5%	1/10W
R858	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-844-11	METAL CHIP	82K	5%	1/10W
R862	1-216-845-11	METAL CHIP	100K	5%	1/10W
R863	1-216-845-11	METAL CHIP	100K	5%	1/10W
R868	1-216-833-11	METAL CHIP	10K	5%	1/10W
R872	1-216-833-11	METAL CHIP	10K	5%	1/10W
R874	1-216-845-11	METAL CHIP	100K	5%	1/10W
R875	1-216-845-11	METAL CHIP	100K	5%	1/10W

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1-861-263-11 H/P BOARD

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Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C800	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C801	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C802	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C803	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C804	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C806	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
		< CONNECTOR >			
CN804	1-785-331-11	PIN, CONNECTOR (LIGHT ANGLE) 5P			
		< DIODE >			
D800	8-719-988-61	DIODE 1SS355TE-17			
D801	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB800	1-500-284-21	INDUCTOR, FERRITE BEAD			
FB802	1-469-144-21	FERRITE, EMI (SMD) (2012)			
FB803	1-469-144-21	FERRITE, EMI (SMD) (2012)			
FB805	1-469-144-21	FERRITE, EMI (SMD) (2012)			
		< JACK >			
J800	1-566-891-21	JACK (PHONES)			
		< COIL >			
L800	1-410-387-11	INDUCTOR	33uH		
L801	1-410-387-11	INDUCTOR	33uH		
L802	1-469-144-21	FERRITE, EMI (SMD) (2012)			
L803	1-469-144-21	FERRITE, EMI (SMD) (2012)			
		< TRANSISTOR >			
Q800	8-729-920-31	TRANSISTOR	DTC343TK		
Q801	8-729-920-31	TRANSISTOR	DTC343TK		
Q803	8-729-920-31	TRANSISTOR	DTC343TK		
Q804	8-729-920-31	TRANSISTOR	DTC343TK		
		< RESISTOR >			
R800	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R801	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R802	1-216-805-11	METAL CHIP	47	5%	1/10W
R803	1-216-805-11	METAL CHIP	47	5%	1/10W
R805	1-216-805-11	METAL CHIP	47	5%	1/10W
R807	1-216-805-11	METAL CHIP	47	5%	1/10W

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A-4752-746-A IO BOARD, COMPLETE (EXCEPT AUS)
A-1053-130-A IO BOARD, COMPLETE (AUS)

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Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C202	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C206	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C207	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C208	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C211	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C213	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C214	1-104-662-91	ELECT	22uF	20%	25V
C215	1-104-662-91	ELECT	22uF	20%	25V
C216	1-104-662-91	ELECT	22uF	20%	25V
C217	1-104-662-91	ELECT	22uF	20%	25V
C222	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C223	1-126-935-11	ELECT	470uF	20%	16V
C227	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C228	1-126-916-11	ELECT	1000uF	20%	6.3V
C229	1-126-916-11	ELECT	1000uF	20%	6.3V
C230	1-126-916-11	ELECT	1000uF	20%	6.3V
C231	1-126-916-11	ELECT	1000uF	20%	6.3V
C232	1-126-916-11	ELECT	1000uF	20%	6.3V
C233	1-104-662-91	ELECT	22uF	20%	25V
C235	1-104-662-91	ELECT	22uF	20%	25V
C238	1-104-662-91	ELECT	22uF	20%	25V
C239	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C240	1-126-964-11	ELECT	10uF	20%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V
C242	1-126-935-11	ELECT	470uF	20%	16V
C243	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C244	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C245	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C246	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C247	1-126-960-11	ELECT	1uF	20%	50V
C248	1-126-960-11	ELECT	1uF	20%	50V
C249	1-126-964-11	ELECT	10uF	20%	50V
C250	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C251	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C252	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C256	1-104-662-91	ELECT	22uF	20%	25V
C257	1-104-662-91	ELECT	22uF	20%	25V
C259	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C263	1-126-964-11	ELECT	10uF	20%	50V
C266	1-104-662-91	ELECT	22uF	20%	25V
C267	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C268	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V

IO **LF**

Ref. No.	Part No.	Description			Remark
C269	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C271	1-115-156-11	CERAMIC CHIP	1uF		10V
C277	1-126-934-11	ELECT	220uF	20%	16V
C278	1-104-662-91	ELECT	22uF	20%	25V
C279	1-104-662-91	ELECT	22uF	20%	25V
C280	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C281	1-115-156-11	CERAMIC CHIP	1uF		10V
C282	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C284	1-104-662-91	ELECT	22uF	20%	25V
C288	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN200	1-568-830-11	CONNECTOR, FFC 11P			
CN201	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P			
CN202	1-784-213-11	FFC/CONNECTOR, FPC (LIF (BIB-ZIF)) 14P			
CN203	1-779-273-11	CONNECTOR, FFC (LIF (NON-ZIF)) 5P			
		< IC >			
IC200	8-759-385-76	IC MC14052 BDR2			
IC201	6-705-602-01	IC MM1623BFBE			
IC203	8-759-710-97	IC NJM4565M-D			
		< JACK >			
J200	1-764-593-21	JACK 2P (VIDEO/SAT)			
J201	1-817-449-11	JACK, PIN 3P (COMPONENT VIDEO OUT)			
J203	1-694-920-11	TERMINAL BOARD (S TERMINAL+1P) (MONITOR OUT)			
		< COIL >			
L200	1-414-754-11	INDUCTOR	10uH		
L206	1-412-959-11	INDUCTOR	47uH		
L207	1-414-754-11	INDUCTOR	10uH		
L208	1-414-754-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q202	8-729-038-68	TRANSISTOR	KRC103S		
Q203	8-729-038-68	TRANSISTOR	KRC103S		
Q211	8-729-034-51	TRANSISTOR	KTC3875		
Q212	8-729-034-51	TRANSISTOR	KTC3875		
		< RESISTOR >			
R203	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R204	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R207	1-216-841-11	METAL CHIP	47K	5%	1/10W
R209	1-216-841-11	METAL CHIP	47K	5%	1/10W
R212	1-216-841-11	METAL CHIP	47K	5%	1/10W
R215	1-216-841-11	METAL CHIP	47K	5%	1/10W
R216	1-216-833-11	METAL CHIP	10K	5%	1/10W
R217	1-216-833-11	METAL CHIP	10K	5%	1/10W
R218	1-216-833-11	METAL CHIP	10K	5%	1/10W
R221	1-216-833-11	METAL CHIP	10K	5%	1/10W
R222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R226	1-216-833-11	METAL CHIP	10K	5%	1/10W
R227	1-216-833-11	METAL CHIP	10K	5%	1/10W
R228	1-216-833-11	METAL CHIP	10K	5%	1/10W
R229	1-216-833-11	METAL CHIP	10K	5%	1/10W
R231	1-218-285-11	METAL CHIP	75	5%	1/10W
R232	1-218-285-11	METAL CHIP	75	5%	1/10W
R233	1-218-285-11	METAL CHIP	75	5%	1/10W
R234	1-218-285-11	METAL CHIP	75	5%	1/10W
R235	1-216-821-11	METAL CHIP	1K	5%	1/10W
R236	1-216-809-11	METAL CHIP	100	5%	1/10W
R237	1-218-285-11	METAL CHIP	75	5%	1/10W
R238	1-218-285-11	METAL CHIP	75	5%	1/10W
R239	1-216-809-11	METAL CHIP	100	5%	1/10W
R244	1-216-833-11	METAL CHIP	10K	5%	1/10W
R248	1-216-833-11	METAL CHIP	10K	5%	1/10W
R251	1-216-821-11	METAL CHIP	1K	5%	1/10W
R253	1-216-839-11	METAL CHIP	33K	5%	1/10W
R254	1-216-839-11	METAL CHIP	33K	5%	1/10W
R256	1-216-839-11	METAL CHIP	33K	5%	1/10W
R257	1-216-839-11	METAL CHIP	33K	5%	1/10W
R259	1-216-841-11	METAL CHIP	47K	5%	1/10W
R260	1-216-841-11	METAL CHIP	47K	5%	1/10W
R263	1-216-833-11	METAL CHIP	10K	5%	1/10W
R267	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R268	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R271	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R272	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R275	1-216-817-11	METAL CHIP	470	5%	1/10W
R277	1-216-817-11	METAL CHIP	470	5%	1/10W
R284	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R285	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R286	1-216-813-11	METAL CHIP	220	5%	1/10W
R287	1-216-835-11	METAL CHIP	15K	5%	1/10W
R290	1-216-853-11	METAL CHIP	470K	5%	1/10W
R292	1-216-809-11	METAL CHIP	100	5%	1/10W
R293	1-216-835-11	METAL CHIP	15K	5%	1/10W
R294	1-216-853-11	METAL CHIP	470K	5%	1/10W
R295	1-216-813-11	METAL CHIP	220	5%	1/10W
R296	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R298	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R300	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-833-11	METAL CHIP	10K	5%	1/10W
R302	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R303	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R305	1-216-833-11	METAL CHIP	10K	5%	1/10W

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Ref. No.	Part No.	Description			Remark
	1-861-264-11	LF BOARD ********			
		< CAPACITOR >			
⚠C903	1-117-916-51	FILM	0.22uF	10%	275V
		< CONNECTOR >			
CN900	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
* CN901	1-564-321-21	PIN, CONNECTOR (3.96mm PITCH) 2P			
		< LINE FILTER >			
⚠LF901	1-456-081-21	COIL, LINE FILTER (E41, EA, KR, AUS)			
⚠LF901	1-456-082-11	COIL, LINE FILTER (US, CND, MX, TW)			

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
	A-1052-864-A	MAIN BOARD, COMPLETE (150: MX)	
	A-1053-127-A	MAIN BOARD, COMPLETE (AUS)	
	A-1054-637-A	MAIN BOARD, COMPLETE (E41)	
	A-1062-037-A	MAIN BOARD, COMPLETE (250: US, CND)	
	A-1065-470-A	MAIN BOARD, COMPLETE (EA)	
	A-1065-499-A	MAIN BOARD, COMPLETE (TW, KR)	
	A-1067-908-A	MAIN BOARD, COMPLETE (250: MX)	
	A-4752-751-A	MAIN BOARD, COMPLETE (150: US, CND)	
		********************	
		< CAPACITOR >	
C501	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C502	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C503	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C505	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C506	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C507	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C508	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C509	1-126-964-11	ELECT 10uF 20% 50V	
C510	1-104-658-91	ELECT 100uF 20% 10V	
C511	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C512	1-104-658-91	ELECT 100uF 20% 10V	
C513	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C514	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C515	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C516	1-128-934-91	CERAMIC CHIP 0.33uF 20% 10V	
C517	1-128-934-91	CERAMIC CHIP 0.33uF 20% 10V	
C518	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C519	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C520	1-126-947-11	ELECT 47uF 20% 35V	
C521	1-126-923-91	ELECT 220uF 20% 10V	
C522	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C524	1-104-905-11	CAPACITOR 0.22F 5.5V	
C525	1-104-658-91	ELECT 100uF 20% 10V	
C526	1-110-501-11	CERAMIC CHIP 0.33uF 10% 16V	
C527	1-104-658-91	ELECT 100uF 20% 10V	
C528	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C529	1-126-947-11	ELECT 47uF 20% 35V	
C530	1-115-467-11	CERAMIC CHIP 0.22uF 10% 10V	
C532	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C535	1-126-947-11	ELECT 47uF 20% 35V	
C537	1-126-926-11	ELECT 1000uF 20% 10V	
C539	1-115-467-11	CERAMIC CHIP 0.22uF 10% 10V	
C540	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C546	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C547	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C548	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C549	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C550	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C552	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C553	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C554	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C555	1-126-916-11	ELECT 1000uF 20% 6.3V	
C556	1-126-926-11	ELECT 1000uF 20% 10V	
		< CONNECTOR >	
CN501	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P	
CN503	1-778-691-11	CONNECTOR, FFC/FPC 19P	
CN504	1-785-466-11	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 7P	
* CN505	1-784-365-31	CONNECTOR, FFC/FPC 5P	
CN509	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P	
CN513	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P	
		< DIODE >	
D502	8-719-988-61	DIODE 1SS355TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D504	8-719-988-61	DIODE 1SS355TE-17	
D505	8-719-988-61	DIODE 1SS355TE-17	
D507	8-719-988-61	DIODE 1SS355TE-17	
D508	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB500	1-414-813-11	FERRITE, EMI (SMD) (2012)	
FB503	1-216-295-91	SHORT CHIP 0	
FB505	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB508	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB509	1-469-324-21	FERRITE, EMI (SMD) (2012)	
		< IC >	
IC509	6-804-494-01	IC uPD703260YGF-S21-JBT-A	
IC511	6-701-680-01	IC PST3629NR	
IC512	6-705-469-01	IC BA50BC0FP-E2	
IC513	6-705-469-01	IC BA50BC0FP-E2	
IC514	6-701-189-01	IC MC74VHC1GU04DFT1	
IC515	6-701-011-01	IC uPC2910T-E1	
IC516	6-705-470-01	IC BA70BC0FP-E2	
		< COIL >	
L501	1-414-398-11	INDUCTOR 10uH	
L502	1-414-398-11	INDUCTOR 10uH	
L503	1-414-398-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q505	8-729-038-54	TRANSISTOR KRA102S	
Q506	8-729-034-51	TRANSISTOR KTC3875	
Q507	8-729-034-51	TRANSISTOR KTC3875	
Q508	8-729-034-51	TRANSISTOR KTC3875	
Q509	8-729-034-49	TRANSISTOR KRC104S	
		< RESISTOR >	
R501	1-216-809-11	METAL CHIP 100 5% 1/10W	
R502	1-216-809-11	METAL CHIP 100 5% 1/10W	
R503	1-216-809-11	METAL CHIP 100 5% 1/10W	
R504	1-216-809-11	METAL CHIP 100 5% 1/10W	
R505	1-216-809-11	METAL CHIP 100 5% 1/10W	
R506	1-216-809-11	METAL CHIP 100 5% 1/10W	
R507	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R508	1-216-809-11	METAL CHIP 100 5% 1/10W	
R509	1-216-809-11	METAL CHIP 100 5% 1/10W	
R510	1-216-809-11	METAL CHIP 100 5% 1/10W	
R511	1-216-809-11	METAL CHIP 100 5% 1/10W	
R514	1-216-809-11	METAL CHIP 100 5% 1/10W	
R515	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R516	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R517	1-216-833-11	METAL CHIP 10K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R518	1-216-835-11	METAL CHIP	15K	5%	1/10W
R521	1-216-833-11	METAL CHIP	10K	5%	1/10W (250: MX, CND)
R522	1-216-833-11	METAL CHIP	10K	5%	1/10W (TW, EA, KR)
R522	1-216-835-11	METAL CHIP	15K	5%	1/10W (AUS)
R522	1-216-841-11	METAL CHIP	47K	5%	1/10W (US, CND, MX, E41)
R523	1-216-809-11	METAL CHIP	100	5%	1/10W
R530	1-216-809-11	METAL CHIP	100	5%	1/10W
R531	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R532	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R533	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (250)
R534	1-216-833-11	METAL CHIP	10K	5%	1/10W
R535	1-216-809-11	METAL CHIP	100	5%	1/10W
R536	1-216-833-11	METAL CHIP	10K	5%	1/10W
R537	1-216-809-11	METAL CHIP	100	5%	1/10W
R538	1-216-833-11	METAL CHIP	10K	5%	1/10W
R539	1-216-809-11	METAL CHIP	100	5%	1/10W
R540	1-216-833-11	METAL CHIP	10K	5%	1/10W (MX, E41)
R540	1-216-837-11	METAL CHIP	22K	5%	1/10W (US, CND)
R540	1-216-841-11	METAL CHIP	47K	5%	1/10W (EA, AUS)
R542	1-216-809-11	METAL CHIP	100	5%	1/10W
R543	1-216-864-11	SHORT CHIP	0		
R546	1-216-809-11	METAL CHIP	100	5%	1/10W
R547	1-216-809-11	METAL CHIP	100	5%	1/10W
R548	1-216-821-11	METAL CHIP	1K	5%	1/10W
R549	1-216-833-11	METAL CHIP	10K	5%	1/10W
R550	1-216-809-11	METAL CHIP	100	5%	1/10W
R551	1-216-821-11	METAL CHIP	1K	5%	1/10W
R552	1-216-864-11	SHORT CHIP	0		
R553	1-216-809-11	METAL CHIP	100	5%	1/10W
R555	1-216-821-11	METAL CHIP	1K	5%	1/10W
R556	1-216-833-11	METAL CHIP	10K	5%	1/10W
R558	1-216-833-11	METAL CHIP	10K	5%	1/10W
R560	1-216-833-11	METAL CHIP	10K	5%	1/10W
R562	1-216-821-11	METAL CHIP	1K	5%	1/10W
R563	1-216-833-11	METAL CHIP	10K	5%	1/10W
R564	1-216-833-11	METAL CHIP	10K	5%	1/10W
R565	1-216-833-11	METAL CHIP	10K	5%	1/10W
R566	1-216-833-11	METAL CHIP	10K	5%	1/10W
R567	1-216-841-11	METAL CHIP	47K	5%	1/10W
R568	1-216-833-11	METAL CHIP	10K	5%	1/10W
R571	1-216-833-11	METAL CHIP	10K	5%	1/10W
R572	1-216-833-11	METAL CHIP	10K	5%	1/10W
R573	1-216-833-11	METAL CHIP	10K	5%	1/10W
R574	1-216-841-11	METAL CHIP	47K	5%	1/10W
R576	1-216-841-11	METAL CHIP	47K	5%	1/10W
R577	1-216-853-11	METAL CHIP	470K	5%	1/10W
R578	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R579	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R580	1-216-833-11	METAL CHIP	10K	5%	1/10W
R582	1-216-813-11	METAL CHIP	220	5%	1/10W

Ref. No.	Part No.	Description			Remark
R586	1-216-809-11	METAL CHIP	100	5%	1/10W
R588	1-216-833-11	METAL CHIP	10K	5%	1/10W
R589	1-216-864-11	SHORT CHIP	0		
R590	1-216-809-11	METAL CHIP	100	5%	1/10W
R591	1-216-809-11	METAL CHIP	100	5%	1/10W
R592	1-216-845-11	METAL CHIP	100K	5%	1/10W
R593	1-216-809-11	METAL CHIP	100	5%	1/10W
R594	1-216-809-11	METAL CHIP	100	5%	1/10W
R595	1-216-841-11	METAL CHIP	47K	5%	1/10W
R596	1-216-809-11	METAL CHIP	100	5%	1/10W
R598	1-216-809-11	METAL CHIP	100	5%	1/10W
R599	1-216-809-11	METAL CHIP	100	5%	1/10W
R600	1-216-833-11	METAL CHIP	10K	5%	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W
R603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R604	1-216-809-11	METAL CHIP	100	5%	1/10W
R605	1-216-833-11	METAL CHIP	10K	5%	1/10W
R607	1-216-833-11	METAL CHIP	10K	5%	1/10W
R609	1-216-864-11	SHORT CHIP	0		
R610	1-216-864-11	SHORT CHIP	0		
R611	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R612	1-216-864-11	SHORT CHIP	0		
R613	1-216-809-11	METAL CHIP	100	5%	1/10W
R614	1-216-833-11	METAL CHIP	10K	5%	1/10W
R615	1-216-833-11	METAL CHIP	10K	5%	1/10W
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W
R617	1-216-833-11	METAL CHIP	10K	5%	1/10W
R620	1-216-809-11	METAL CHIP	100	5%	1/10W
R621	1-216-845-11	METAL CHIP	100K	5%	1/10W
R624	1-216-841-11	METAL CHIP	47K	5%	1/10W
R690	1-216-864-11	SHORT CHIP	0		
R691	1-216-864-11	SHORT CHIP	0		
R692	1-216-864-11	SHORT CHIP	0		
R693	1-216-864-11	SHORT CHIP	0		
R698	1-216-864-11	SHORT CHIP	0		
R699	1-216-864-11	SHORT CHIP	0		
		< VIBRATOR >			
X501	1-795-058-21	VIBRATOR, CERAMIC			

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		MOTOR BOARD *************			
		< SWITCH >			
S761	1-786-704-11	SWITCH, LEVER			

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	A-4752-728-A	PANEL BOARD, COMPLETE **********************			
	4-255-281-01	LED HOLDER			
		< CAPACITOR >			
C817	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C818	1-126-964-11	ELECT	10uF	20%	50V
C819	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C821	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C823	1-162-960-11	CERAMIC CHIP	220PF	10%	50V

PANEL

Ref. No.	Part No.	Description			Remark
C826	1-124-234-00	ELECT	22uF	20%	10V
C830	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V
C835	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C836	1-119-943-91	ELECT	47uF	20%	50V
C837	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C860	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C861	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C862	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN800	1-779-556-21	CONNECTOR, FFC (LIF (NON-ZIF)) 19P			
CN801	1-568-828-11	CONNECTOR, FFC 9P			
		< DIODE >			
D803	6-500-522-01	DIODE 10EDB40-TA1B2			
D806	8-719-056-13	DIODE SML79423C-TP15 (DISC1)			
D807	8-719-056-13	DIODE SML79423C-TP15 (DISC2)			
D808	8-719-056-13	DIODE SML79423C-TP15 (DISC3)			
D809	8-719-056-13	DIODE SML79423C-TP15 (DISC4)			
D810	8-719-988-61	DIODE 1SS355TE-17			
D811	8-719-988-61	DIODE 1SS355TE-17			
D812	8-719-056-13	DIODE SML79423C-TP15 (DISC5)			
D813	8-719-988-61	DIODE 1SS355TE-17			
D814	8-719-988-61	DIODE 1SS355TE-17			
D815	8-719-069-56	DIODE UDZSTE-176.2B			
D816	6-500-940-01	DIODE SEL6E14C-STP5			
D817	6-500-940-01	DIODE SEL6E14C-STP5			
D818	6-500-940-01	DIODE SEL6E14C-STP5			
D819	6-500-940-01	DIODE SEL6E14C-STP5			
D820	6-500-940-01	DIODE SEL6E14C-STP5			
D821	6-500-940-01	DIODE SEL6E14C-STP5			
		< SHORT >			
FB804	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC802	6-701-888-01	IC BU2152FS			
		< COIL >			
L804	1-410-671-31	INDUCTOR	47uH		
L806	1-469-144-21	FERRITE, EMI (SMD) (2012)			
		< TRANSISTOR >			
Q806	8-729-034-51	TRANSISTOR	KTC3875		
Q807	8-729-034-51	TRANSISTOR	KTC3875		
Q808	6-550-065-01	TRANSISTOR	CPH5504-TL-E		
Q820	8-729-038-68	TRANSISTOR	KRC103S		
Q821	8-729-038-68	TRANSISTOR	KRC103S		
Q822	8-729-038-68	TRANSISTOR	KRC103S		
		< RESISTOR >			
R812	1-216-864-11	SHORT CHIP	0		
R817	1-216-821-11	METAL CHIP	1K	5%	1/10W
R818	1-216-833-11	METAL CHIP	10K	5%	1/10W
R821	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R823	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R824	1-216-821-11	METAL CHIP	1K	5%	1/10W
R825	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R826	1-216-812-11	METAL CHIP	180	5%	1/10W
R827	1-216-812-11	METAL CHIP	180	5%	1/10W
R828	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R829	1-216-812-11	METAL CHIP	180	5%	1/10W
R830	1-216-812-11	METAL CHIP	180	5%	1/10W
R831	1-216-812-11	METAL CHIP	180	5%	1/10W
R832	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R833	1-216-812-11	METAL CHIP	180	5%	1/10W
R834	1-216-812-11	METAL CHIP	180	5%	1/10W
R835	1-216-812-11	METAL CHIP	180	5%	1/10W
R836	1-216-833-11	METAL CHIP	10K	5%	1/10W
R837	1-216-812-11	METAL CHIP	180	5%	1/10W
R838	1-216-812-11	METAL CHIP	180	5%	1/10W
R839	1-216-839-11	METAL CHIP	33K	5%	1/10W
R840	1-216-809-11	METAL CHIP	100	5%	1/10W
R841	1-216-809-11	METAL CHIP	100	5%	1/10W
R842	1-216-809-11	METAL CHIP	100	5%	1/10W
R843	1-216-809-11	METAL CHIP	100	5%	1/10W
R844	1-216-837-11	METAL CHIP	22K	5%	1/10W
R845	1-216-821-11	METAL CHIP	1K	5%	1/10W
R846	1-216-809-11	METAL CHIP	100	5%	1/10W
R847	1-216-833-11	METAL CHIP	10K	5%	1/10W
R848	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R849	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R850	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R851	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R852	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R855	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R856	1-216-837-11	METAL CHIP	22K	5%	1/10W
R859	1-216-821-11	METAL CHIP	1K	5%	1/10W
R861	1-216-864-11	SHORT CHIP	0		
R866	1-216-815-11	METAL CHIP	330	5%	1/10W
R869	1-216-815-11	METAL CHIP	330	5%	1/10W
R873	1-216-815-11	METAL CHIP	330	5%	1/10W
		< SWITCH >			
S801	1-771-608-21	SWITCH, TACTILE (⏏ (DISC1))			
S802	1-771-608-21	SWITCH, TACTILE (⏏ (DISC2))			
S803	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S804	1-771-608-21	SWITCH, TACTILE (DISC1)			
S805	1-771-608-21	SWITCH, TACTILE (DISC2)			
S806	1-771-608-21	SWITCH, TACTILE (DISC3)			
S807	1-762-875-21	SWITCH, KEYBOARD (VOLUME -)			
S808	1-762-875-21	SWITCH, KEYBOARD (⏭ PRESET +)			
S809	1-762-875-21	SWITCH, KEYBOARD (▷)			
S810	1-762-875-21	SWITCH, KEYBOARD (■)			
S811	1-771-608-21	SWITCH, TACTILE (DISC4)			
S812	1-771-608-21	SWITCH, TACTILE (DISC5)			
S813	1-762-875-21	SWITCH, KEYBOARD (⏮ PRESET -)			
S814	1-771-608-21	SWITCH, TACTILE (⏏ (DISC5))			
S815	1-762-875-21	SWITCH, KEYBOARD (VOLUME +)			
S816	1-771-608-21	SWITCH, TACTILE (⏏ (DISC4))			
S817	1-762-875-21	SWITCH, KEYBOARD (⏸)			
S818	1-771-608-21	SWITCH, TACTILE (⏏ (DISC3))			

PANEL POWER SW RF

Ref. No.	Part No.	Description			Remark
		< TRANSFORMER >			
T801	1-443-172-11	TRANSFORMER, DC-DC CONVERTER			

****

Ref. No.	Part No.	Description			Remark
	1-861-265-11	POWER SW BOARD			
		****************			
		< CAPACITOR >			
C805	1-126-795-11	ELECT	10uF	20%	50V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN805	1-785-331-11	PIN, CONNECTOR (LIGHT ANGLE) 5P			
		< DIODE >			
D802	6-500-809-01	DIODE SELU5223C-STP15 (STAND BY)			
		< IC >			
IC800	8-759-826-34	IC NJL74H400A (🅁)			
		< RESISTOR >			
R804	1-216-805-11	METAL CHIP	47	5%	1/10W
R811	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R814	1-216-805-11	METAL CHIP	47	5%	1/10W
		< SWITCH >			
S800	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			

****

Ref. No.	Part No.	Description			Remark
	A-4728-690-A	RF BOARD, COMPLETE			
		******************			
		< CAPACITOR >			
C001	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C002	1-124-779-00	ELECT CHIP	10uF	20%	16V
C003	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C004	1-124-779-00	ELECT CHIP	10uF	20%	16V
C005	1-128-993-21	ELECT CHIP	22uF	20%	10V
C006	1-128-993-21	ELECT CHIP	22uF	20%	10V
C008	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C009	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C010	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C011	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C013	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C014	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C015	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C016	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C017	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C018	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C019	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C020	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C021	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C022	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C023	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C024	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C026	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C027	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C028	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C029	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C030	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C031	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C032	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C033	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C034	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C035	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C036	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C037	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C038	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C039	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C040	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C041	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C042	1-164-218-11	CERAMIC CHIP	180PF	5%	50V
C049	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C050	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C051	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C052	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN001	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P			
CN002	1-784-836-21	CONNECTOR, FFC (LIF (NON-ZIF)) 29P			
CN003	1-784-861-21	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
		< DIODE >			
D001	8-719-988-61	DIODE 1SS355TE-17			
D002	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC001	6-703-922-01	IC SP3723CAF0PM			
IC003	6-703-921-01	IC TL343IDBVR			
		< COIL >			
L001	1-412-031-11	INDUCTOR	47uH		
L002	1-412-031-11	INDUCTOR	47uH		
		< TRANSISTOR >			
Q001	8-729-903-46	TRANSISTOR	2SB1132-P		
Q002	8-729-903-46	TRANSISTOR	2SB1132-P		
		< RESISTOR >			
R001	1-218-668-11	METAL CHIP	100	0.5%	1/10W
R003	1-216-803-11	METAL CHIP	33	5%	1/10W
R004	1-216-803-11	METAL CHIP	33	5%	1/10W
R005	1-216-841-11	METAL CHIP	47K	5%	1/10W
R006	1-216-817-11	METAL CHIP	470	5%	1/10W
R007	1-216-803-11	METAL CHIP	33	5%	1/10W
R008	1-216-803-11	METAL CHIP	33	5%	1/10W
R009	1-216-841-11	METAL CHIP	47K	5%	1/10W
R010	1-216-817-11	METAL CHIP	470	5%	1/10W
R011	1-216-864-11	SHORT CHIP	0		
R012	1-216-864-11	SHORT CHIP	0		
R013	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description				Remark
R014	1-216-864-11	SHORT CHIP	0			
R015	1-216-864-11	SHORT CHIP	0			
R016	1-216-864-11	SHORT CHIP	0			
R017	1-216-864-11	SHORT CHIP	0			
R018	1-216-864-11	SHORT CHIP	0			
R019	1-216-864-11	SHORT CHIP	0			
R020	1-216-864-11	SHORT CHIP	0			
R021	1-216-864-11	SHORT CHIP	0			
R022	1-216-813-11	METAL CHIP	220	5%	1/10W	
R023	1-216-820-11	METAL CHIP	820	5%	1/10W	
R024	1-216-864-11	SHORT CHIP	0			
R025	1-216-809-11	METAL CHIP	100	5%	1/10W	
R026	1-218-718-11	METAL CHIP	12K	0.5%	1/10W	
R027	1-216-864-11	SHORT CHIP	0			
R028	1-216-864-11	SHORT CHIP	0			
R029	1-216-864-11	SHORT CHIP	0			
R031	1-216-809-11	METAL CHIP	100	5%	1/10W	
R033	1-216-845-11	METAL CHIP	100K	5%	1/10W	
R034	1-216-817-11	METAL CHIP	470	5%	1/10W	
R035	1-216-864-11	SHORT CHIP	0			
R041	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R046	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R047	1-216-839-11	METAL CHIP	33K	5%	1/10W	
R091	1-218-913-91	METAL CHIP	560K	0.5%	1/10W	

****

SENSOR BOARD
****

< IC >

Ref. No.	Part No.	Description
IC751	8-759-989-76	IC RPR-359F

****

SPK BOARD
****

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C340	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C341	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C342	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C343	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C481	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C482	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C483	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C484	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C485	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C486	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C487	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C488	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C489	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C490	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C491	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C492	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	

< CONNECTOR >

Ref. No.	Part No.	Description
* CN309	1-564-241-11	PIN, CONNECTOR (3.96mm PITCH) 4P
CN311	1-691-766-11	PLUG (MICRO CONNECTOR) 4P
CN312	1-691-766-21	PLUG (MICRO CONNECTOR) 4P

< TERMINAL >

Ref. No.	Part No.	Description
GP306	1-537-770-21	TERMINAL BOARD, GROUND
GP307	1-537-770-21	TERMINAL BOARD, GROUND
TB301	1-694-998-21	TERMINAL BOARD (SPEAKER)

****

SW (1) BOARD
****

< SWITCH >

Ref. No.	Part No.	Description
S721	1-786-084-11	SWITCH, DETECTION

****

SW (2) BOARD
****

< SWITCH >

Ref. No.	Part No.	Description
S731	1-786-382-11	SWITCH, PUSH (1 KEY)

****

A-4750-232-A TRANSLATION BOARD, COMPLETE
****

< CAPACITOR >

Ref. No.	Part No.	Description				Remark
C701	1-126-786-11	ELECT	47uF	20%	16V	
C702	1-126-791-11	ELECT	10uF	20%	35V	
C761	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C762	1-162-306-11	CERAMIC	0.01uF	20%	16V	

< CONNECTOR >

Ref. No.	Part No.	Description
CN701	1-779-558-21	CONNECTOR, FFC (LIF (NON-ZIF)) 21P

< DIODE >

Ref. No.	Part No.	Description
D701	8-719-921-40	DIODE MTZJ-4.7C
D711	8-719-982-10	DIODE MTZJ-4.3A

< IC >

Ref. No.	Part No.	Description
IC701	8-759-598-69	IC BA6956AN
IC711	8-759-598-69	IC BA6956AN

< TRANSISTOR >

Ref. No.	Part No.	Description	
Q751	8-729-119-78	TRANSISTOR	2SC2785-HFE

< RESISTOR >

Ref. No.	Part No.	Description				Remark
R701	1-249-415-11	CARBON	680	5%	1/4W	
R702	1-247-807-31	CARBON	100	5%	1/4W	
R711	1-249-415-11	CARBON	680	5%	1/4W	
R712	1-247-807-31	CARBON	100	5%	1/4W	
R751	1-247-806-11	CARBON	91	5%	1/4W	
R752	1-249-429-11	CARBON	10K	5%	1/4W	
R753	1-249-429-11	CARBON	10K	5%	1/4W	
R754	1-249-430-11	CARBON	12K	5%	1/4W	
R755	1-249-429-11	CARBON	10K	5%	1/4W	

****

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS **************	
5	1-763-861-12	FAN, DC	
6	1-828-962-11	WIRE (FLAT TYPE) (11 CORE)	
57	1-962-870-11	WIRE (FLAT TYPE) (9 CORE)	
58	1-829-211-11	WIRE (FLAT TYPE) (19 CORE)	
103	1-500-386-21	FILTER, CLAMP (FERRITE CORE)	
⚠105	1-783-531-72	CORD, POWER (US, CND)	
⚠105	1-696-169-51	CORD, POWER (E41)	
⚠105	1-696-847-22	CORD, POWER (AUS)	
⚠105	1-751-520-21	CORD, POWER (EA)	
⚠105	1-775-789-91	CORD, POWER (MX)	
⚠105	1-827-597-41	CORD, POWER (TW)	
⚠105	1-769-079-32	CORD, POWER (KR)	
⚠108	1-468-836-12	REGULATOR, SWITCHING (US, CND, MX, TW)	
⚠108	1-468-837-12	REGULATOR, SWITCHING (EA, E41,KR, AUS)	
112	1-828-411-11	WIRE (FLAT TYPE) (29 CORE)	
114	1-828-371-11	WIRE (FLAT TYPE) (21 CORE)	
115	1-828-349-11	WIRE (FLAT TYPE) (17 CORE)	
116	1-829-212-11	WIRE (FLAT TYPE) (15 CORE)	
117	1-962-869-11	WIRE (FLAT TYPE) (5 CORE)	
118	1-828-954-11	WIRE (FLAT TYPE) (9 CORE)	
⚠302	A-4713-410-A	OPTICAL PICK-UP (DBU-1)	
305	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)	
M761	A-4713-174-A	MOTOR (81) ASSY (LD/ST MOTOR)	
M762	A-4713-174-A	MOTOR (81) ASSY (BU U/D MOTOR)	
S771	1-478-552-11	ENCODER, ROTARY (MD)	
S781	1-478-551-11	ENCODER, ROTARY (ST U/D ENCODER)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

HCD-BC150/BC250

SONY®

SERVICE MANUAL

Ver 1.1 2004.06

US Model
Canadian Model
E Model
HCD-BC150/BC250
Australian Model
HCD-BC150

SUPPLEMENT-1

Subject: TEST MODE and ELECTRICAL ADJUSTMENT

9-877-956-81

SECTION 1
TEST MODE

Note 1: Regarding the notification symbol "R"
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander (RM-SS250 supplied with the product). When a specific operation requires use of the operating buttons of the remote commander (RM-SS250), "R" is added to the specific operating procedure in this manual. Example MENU/NO "R" The MENU/NO button of remote commander.

Note 2: Incorrect operations may be performed if the test mode is not entered properly.
In this case, press the I/⏻ button to turn the power off, and retry to enter the test mode.

1. Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customers.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons ▶▶I, ▷ and ⏏ (DISC1) simultaneously.
3. When this button is operated, display as "Cold RESET" for a while and all of the settings are reset.

2. Panel Test Mode

- This mode is used to check the software version, LCD, LED and keyboard.

2-1. DVD LED Test Mode

Procedure:

1. Press the I/⏻ button to turn on the power.
2. Press three bottons VOLUME –, I◀◀ and ⏏ (DISC1) simultaneously.
3. When the display LED test mode is activated, all segments are turned on.
4. To exit from this mode, press the I/⏻ button.

2-2. Version Test Mode

Procedure:

1. Press the I/⏻ button to turn the power on.
2. To enter the version test mode, press three buttons VOLUME –, VOLUME + and ⏏ (DISC1) simultaneously.
3. Whenever press the ▶▶I button, the version is displayed in order of STR and DVD.
4. To exit from this mode, press the I/⏻ button.

2-3. Key Test Mode

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons VOLUME –, VOLUME + and the FUNCTION simultaneously.
3. To enter the KEY test mode, the fluorecent indicator displays "KEY 0". Each time a button is pressed, "KEY" value increases. However, once a button is pressed, it is no longer taken into account. When all keys are pressed correctly, "KEY 19" is displayed.
4. To exit from this mode, pull out the AC plug.

3. AMP Test

Procedure:

1. Press the I/⏻ button to turn the power on.
2. To enter the AMP test mode, press three buttons VOLUME –, the I◀◀ and FUNCTION simultaneously.
3. Whenever press the AUTO FORMAT DIRECT "R" button, the version is displayed in order of SWAPF2S, SWAPF2CW, SWAP FULL, EQMIN, EQMAX and SRAHCHECK.
4. When the common test mode is activated, each time press the NIGHT MODE "R" button, the message "NIGHT MODE" is displayed in this order.
5. The message "Volume MAX" is displayed, when press the VOLUME + button or VOLUME + "R" button. The message "Volume MIN" is displayed, when press the VOLUME – button or VOLUME – "R" button.
6. Each time press the DSGX "R" button, the message "DSGX ON", "DSGX OFF" is displayed in this order.
7. To exit from this mode, press the I/⏻ button to turn off the main power.

4. DVD Repeat 5 Times Limit Release Mode

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons ▶▶I, VOLUME + and the ⏏ (DISC1) simultaneously.
3. To exit from this mode, press the I/⏻ button.

5. Disc Tray Lock

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure :

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set DVD function.
3. Insert a disc.
4. Press the ■ button and the ⏏(DISC1) button simultaneously for five seconds.
5. The message "LOCKED" is displayed and the tray is locked.

Releasing Procedure :

1. Press the ■ button and the ⏏(DISC1) button simultaneously for five seconds. again.
2. The message "UNLOCKED" is displayed and the tray is unlocked.

Note: When "LOCKED" is displayed, the slot lock is not released by turning power on/off with the I/⏻ button.

6. DVD Ship Mode

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set the function "DVD".
3. Press three buttons I◀◀, ⏏ (DISC1) and ▶▶I simultaneously.
4. After a message "MECH LOCK" is displayed on the fluorescent indicator tube, pull out the AC plug.
5. To exit from this mode, press the I/⏻ button to turn the set on.

7. DVD Debug In Mode

Procedure:

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set the function "DVD".
3. Press the three buttons VOLUME +, ⏏ (DISC1) and ▶▶I simultaneously.
4. To exit from this mode, press the I/⏻ button to turn the set on.

DVD SECTION

[GENERAL DESCRIPTION]

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

[TEST DISC LIST]

Use the following test disc on test mode.

TDV-520CSO (DVD-SL):	PART No. J-2501-236-A
LUV-P01 (CD):	PART No. 4-999-032-01
TDV-540C (DVD-DL):	PART No. J-2501-235-A

Note: Do not use exiting test disc for DVD.

[STARTING TEST MODE]

1. Press the I/⏻ button to turn the power on, and set the function to DVD.
2. While pressing the ■ stick and ⏏ (DISC1) button, turn the VOLUME + knob clockwise to enter the test mode.
3. It displays "SERVICE IN" on the fluorescent indicator tube, and displays the Test Mode Menu on the monitor screen as follows. (At the bottom of the menu screen, the model name and revision number are displayed)

```
            Test Mode Menu

0. Syscon Diagnosis
1. Drive Auto Adjustment
2. Drive Manual Operation
3. Mecha Aging
4. Emergency History
5. Mecha Error History
6. Version Information
7. Video Level Adjustment
                     Exit: POWER Key
Model    :DAV-BC150
Revision :x.xx
```

4. To execute each function, select the desired menu and press its number on the remote commander.
5. To release from test mode, press the I/⏻ button and turn the power off.

[OPERATING TEST MODE]

0. SYSCON DIAGNOSIS

The same contents as board detail check by serial interface can be checked from the remote commander operation.
On the Test Mode Menu screen, press 0 "R" key on the remote commander, and the following Check Menu will be displayed.

```
     ### Syscon Diagnosis ###

Check Menu
0. Quit
1. All
2. Version
3. EEPROM
4. GPIO
5. SD Bus
6. Video
```

0-0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

0-1. All (All items continuous check)

This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

• Example display

```
     ### Syscon Diagnosis ###

           Diag All Check
            No.2 Version

            2-2. Version
ROM Revision = 1.10



Press NEXT Key to Continue
Press PREV Key to Repeat
```

For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.
Following the message, press the ▶▶I "R" button to go to the next item, or press the I◀◀ "R" button to repeat the same operation again.
To quit the diagnosis and return to Check Menu screen, press the RETURN ⤺ "R" key on the remote commander to display Check Menu.

General Description of Checking Method

Selecting 2 and subsequent items calls the submenu screen of each item. And selecting 2 and subsequent items executes respective menus and outputs the results.
For the contents of each submenu, see "Check Items List" as below.

Check Items List:

- 0-2. Version
  - 0-2-1. All
  - 0-2-2. Revision
  - 0-2-3. ROM Check Sum
  - 0-2-4. Model Type
  - 0-2-5. Region
- 0-3. EEPROM Check
  - 0-3-1. Sampling Check
  - 0-3-2. Detail Check
- 0-4. GP I/O Check
- 0-5. SD Bus Check
- 0-6. Video Check

0-2. Version

0-2-2. Revision
The revision number of ROM (IC206) that the program for the DVD system processor (IC207) is stored.

0-2-3. ROM Check Sum
The check sum of ROM (IC206) that the program for the DVD system processor (IC207) is stored.
(4 digits hexadecimal number)

0-2-4. Model Type
Model name is displayed. (DAV-BC150)

0-2-5. Region
Model destination code is displayed. (2 digits number)

0-3. EEPROM Check

0-3-1. Sampling Check
EEPROM check at every 64 words.
It compares read data with write data of each address.
When there are discrepancies between two data, it displays error.

0-3-2. Detail Check
EEPROM check at every 1 word.
It compares read data with write data of each address.
When there are discrepancies between two data, it displays error.

0-4. GP I/O Check

Pull up/down setting check of the DVD system processor (IC207) pin 150, 151 and 154 (for clock setting port).

0-5. SD Bus Check

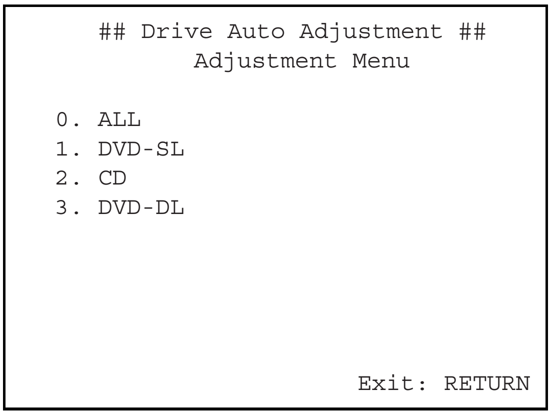
SD bus data check between DVD decoder (IC701) and D-RAM (IC706).

0-6. Video Check

Output the color bars for video level adjustment.

1. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press the 1 “R” key on the remote commander, and the Adjustment Menu will be displayed.



```
     ## Drive Auto Adjustment ##
           Adjustment Menu

  0. ALL
  1. DVD-SL
  2. CD
  3. DVD-DL




                        Exit: RETURN
```

Normally, 0 “R” is selected to adjust DVD (single layer), CD and DVD (dual layer) in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen.
The disc used for adjustment must be the one specified for adjustment.

1-0. ALL

Press the 0 “R” key on the remote commander, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc and 3. DVD-DL disc are adjusted in this order.
Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. You can finish the adjustment by pressing the RETURN ↶ “R” button on the remote commander.

Note: During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

1-1. DVD-SL (single layer)

Press the 1 “R” key on the remote commander and insert a DVD single layer disc following the message. Then the adjustment will be made through the steps below, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps:

1. Sled tilt reset
2. Disc check memory SL
3. Wait 300 msec
4. Set disc type SL
5. LD on
6. Spindle start
7. Wait 1 sec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. Wait 1 sec
14. Sled on
15. Check CLV on
16. Auto LFO adjust
17. Auto focus offset adjust
18. Auto tilt position adjust
19. Auto focus gain adjust
20. Auto focus offset adjust

21. EQ boost adjust
22. Auto loop filter offset adjust
23. Auto track gain adjust

Search Check

    24. 32 track jump forward
    25. 32 track jump reverse
    26. 500 track jump forward
    27. 500 track jump reverse

28. All servo stop
29. EEP copy loop filter offset

1-2. CD

Press the 2 “R” key on the remote commander and insert a CD disc following the message. Then the adjustment will be made through the steps below, then adjusted values will be written to the EEPROM.

CD Adjustment Steps

1. Sled tilt rest
2. Disc check memory CD
3. Wait 500 msec
4. Set disc type CD
5. LD on
6. Spindle start
7. Wait 500 msec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. (TC display start)
14. Wait 1 sec
15. Jitter display start
16. Sled ON
17. Check CLV on
18. Auto loop filter offset adjust
19. Auto focus offset adjust
20. Auto focus gain adjust
21. Auto focus offset adjust
22. EQ boost adjust
23. Auto LFO Adjust
24. Auto track gain adjust

Search Check

    25. 32Tj forward
    26. 32Tj reverse
    27. 500Tj forward
    28. 500Tj reverse

29. All servo stop

1-3. DVD-DL (dual layer)

Press the 3 “R” key on the remote commander and insert a DVD dual layer disc following the message. Then the adjustment will be made through the steps below, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps:

1. Sled tilt reset
2. Disc check memory DL
3. Wait 500 msec
4. Set disc type DL
5. LD on
6. Spindle start
7. Wait 1 sec

Layer 1 Adjust

8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. Wait 500 msec
14. Sled on
15. Check CLV lock
16. Auto loop filter offset adjust, Auto focus adjust
17. Auto focus gain adjust
18. Auto focus offset adjust
19. EQ boost adjust
20. Auto loop filter offset adjust
21. Auto Track Gain Adjust

Search Check

    22. 32 track jump forward
    23. 32 track jump reverse
    24. 500 track jump forward
    25. 500 track jump reverse

Layer 0 Adjust

26. Focus jump (L1 → L0)
27. Auto track offset adjust L0
28. CLVA on
29. Wait 500 msec
30. Tracking on
31. Wait 500 msec
32. Sled on
33. Check CLV lock
34. Auto focus filter offset adjust
35. Auto Focus Adjust
36. Auto focus gain adjust
37. Auto focus offset adjust
38. EQ boost adjust
39. Auto Loop Filter Offset
40. Auto track gain adjust

Search Check

    41. 32 track jump forward
    42. 32 track jump reverse
    43. 500 track jump forward
    44. 500 track jump reverse

Layer Jump Check

    45. Layer jump (L0 → L1)
    46. Layer jump (L1 → L0)

47. All servo stop

2. DRIVE MANUAL OPERATION

Note: This mode is used for design, and not used in service fundamentally.

On the Test Mode Menu screen, press the 2 “R” key on the remote commander, and the Operation Menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

```
      ## Drive Manual Operation ##
              Operation Menu
  1. Disc Type
  2. Servo Control
  3. Track/Layer Jump
  4. Non EEPROM Write Adjust
  5. EEPROM Write Adjust
  6. Memory Check
  7. Disc Check Memory
  8. Error Rate Display
  9. SACD Water Mark

                              Exit: RETURN
```

In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

Note:
1. Set correctly the disc type to be used on the Disc Type screen.
2. In case of an alarm, immediately press the ■ stick to stop the servo operation, and press the I/⏻ button to turn the power off.

Basic operation:

(controllable from front panel or remote commander)

I/⏻ : Power OFF (release the Test Mode)
■ : Servo stop
⏏(DISC1) : Stop and eject/Loading
RETURN ⤺ "R" : Return to Operation Menu or Test Mode Menu
⏮ "R", ⏭ " R" : Transition between sub modes of menu
1 "R" to 9 "R", 0 "R" : Selection of menu items
Cursor ▲ "R" / ▼ "R" : Increase/Decrease in manually adjusted value

2-1. Disc Type

```
             Disc Type

           Disc Type Select

     1. Disc Type Auto Check
     2. Set Disc Type DVD
     3. Set Disc Type CD
     4. Set Disc Type Hybrid






                     Exit: RETURN
```

2-1-1. Disc Type Auto Check

1) Press the 1 "R" key on the remote commander to display the Disc Type Auto Check screen.
2) Insert a disc and press the ENTER/YES "R" key on the remote commander.
3) It judges the type of inserted disc automatically and displays the disc type and so on as below.

```
        Disc Type Auto Check

     Disc Type    xx
     Layer        xx
     Mirr Time    xx
     Mirr Count   xx
     FZC Count    xx
     PI Reference xx
     PI Peak      xx

     ENTER.Execute

                     Exit: RETURN
```

Disc Type : CD, DVD or Hybrid (SACD)
Layer : SINGLE, DUAL or HYBRID
Mirr Time : Mirror time of between disc surface and record surface when disc type judgment. (hexadecimal number)
Mirr Count : The number of times which mirror counts between disc surface and record surface when disc type judging.
FZC Count : The number of times which focus zero cross points of each layer when lens down.
PI Reference : The average of PI reference voltage. (hexadecimal number)
PI Peak : PI peak level voltage. It performs only when disc type judgment is successful. (hexadecimal number)

2-1-2. Disc Type DVD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

1: DVD single layer disc (12 cm)
2: DVD dual layer disc (0 layer, 12 cm)
3: DVD dual layer disc (1 layer, 12 cm)
4: DVD-RW disc (12 cm)
5: DVD single layer disc (8 cm)
6: DVD dual layer disc (0 layer, 8 cm)
7: DVD dual layer disc (1 layer, 8 cm)
8: DVD-RW disc (8 cm)

2-1-3. Disc Type CD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

1: CD disc (normal speed, 12 cm)
2: CD disc (double speed, 12 cm)
3: CD disc (normal speed, 8 cm)
4: CD disc (double speed, 8 cm)
5: CD-RW disc (normal speed, 12 cm)
6: CD-RW disc (double speed, 12 cm)
7: CD-RW disc (normal speed, 8 cm)
8: CD-RW disc (double speed, 8 cm)

2-1-4. Disc Type Hybrid

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

1: SACD Hybrid disc (SACD layer, 12 cm)
2: SACD Hybrid disc (CD layer, normal speed, 12 cm)
3: SACD Hybrid disc (CD layer, double speed, 12 cm)
4: SACD Hybrid disc (SACD layer, 8 cm)
5: SACD Hybrid disc (CD layer, normal speed, 8 cm)
6: SACD Hybrid disc (CD layer, double speed, 8 cm)

2-2. Servo Control

Note: Be sure to perform the disc type setup before performing this item.

```
           Servo Control
  1.LD          off R.Sled FWD
  2.Focus       off L.Sled REV
  3.SPDL        off U.Sled Reset
  4.CLVA        off D.Sled Limit
  5.Trk.        off
  6.Sled        off
  7.Fcs.Srch    off
  8.Fcs.OppL    off

  0.All Servo Off

                     Exit: RETURN
```

On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked.

The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

1 LD : Turn on/off the laser.
2 Focus : Search the focus and turn on the focus.
3 SPDL : Turn on/off the spindle.
4 CLVA : Turn on/off normal servo of spindle servo.
5 Trk. : Turn on/off the tracking servo.
6 Sled : Turn on/off the sled servo.
7 FCS. Srch : Turn on/off the focus search.
8 FCS. OppL : Turn on/off the focus search to another (opposite) layer of designated layer in Disc Type setting. (dual layer disc only)
0 : All servo off.
▶ Sled FWD (right cursor) : Move the sled forward.
◀ Sled REV (left cursor) : Move the sled reverse.
▲ Sled FWD (up cursor) : Reset the sled.
▼ Sled REV (down cursor) : Limit in the sled.

2-3. Track/Layer Jump

```
          Track/Layer Jump
 1.  1Tj        FWD
 2.  1Tj        REV
 3.500Tj  Fine  FWD
 4.500Tj  Fine  REV
 5.10kTj  Dirc  FWD
 6.10kTj  Dirc  REV
 7.20kTj  Dirc  FWD
 8.20kTj  Dirc  REV

 0. All Servo Off

                     Exit: RETURN
```

On this screen, track jump, etc. can be performed. Only for the DVD dual layer disc, the focus jump and layer jump are displayed in the right field

1 1Tj FWD : 1 track jump forward.
2 1Tj REV : 1 track jump reverse.
3 500Tj FWD : 500 track jump (fine search)forward.
4 500Tj REV : 500 track jump (fine search) reverse.
5 10kTj FWD : 10k track jump (direct search) forward.
6 10kTj REV : 10k track jump (direct search) reverse.
7 20kTj FWD : 20k track jump (direct search) forward.
8 20kTj REV : 20k track jump (direct search) reverse.
0 : All servo off.

2-4. Non EEPROM Write Adjust

```
       Non EEPROM Write Adjust

 1. Focus    Offset
 2. Focus    Gain
 3. Trk.     Offset Coarse
 4. Trk.     Offset Fine
 5. Trk.     Gain
 6. EQ Boost

 0.All Servo Off


                     Exit: RETURN
```

On this screen, each item can be adjusted manually. Select the desired number 1 “R” to 6 “R” from the remote commander, and current setting for the selected item will be displayed, then increase or decrease numeric value with the ← “R” key or → “R” key. This value is stored in the EEPROM. If CLV has been applied, the jitter is displayed for reference for the adjustment.

1 Focus Offset : Adjusts focus offset.
2 Focus Gain : Adjusts focus gain.
3 TRK. Offset : Adjusts tracking offset of the RF amp (IC001) side.
4 TRK. Offset : Adjusts tracking offset of the DSP (IC509) side.
5 TRK. Gain : Adjusts track gain.
6 EQ Boost : Adjusts amount of boost of equalizer.
0 : All servo off.

2-5. EEPROM Write Adjust

```
         EEPROM Write Adjust

  1. Focus  Offset
  2. Focus  Gain
  3. Trk.   Offset Coarse
  4. --------------------
  5. Trk.   Gain
  6. EQ     Boost

  0.All Servo Off


                     Exit: RETURN
```

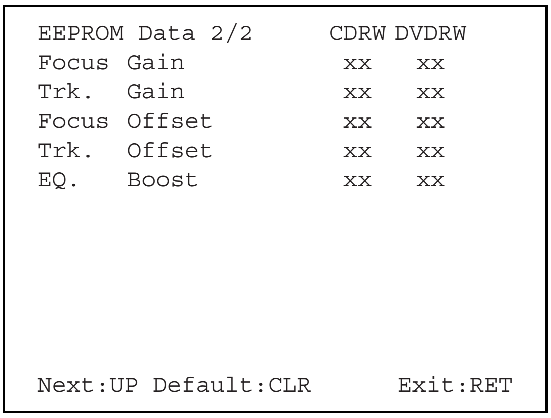
On this screen, each item can be adjusted automatically. Select the desired number 1 “R” to 6 “R” from the remote commander, and selected item is adjusted automatically.

1 Focus Offset : Adjusts focus offset.
2 Focus Gain : Adjusts focus gain.
3 TRK. Offset : Adjusts tracking offset of the RF amp (IC001) side.
5 TRK. Gain : Adjusts track gain.
6 EQ Boost : Adjusts amount of boost of equalizer.
0 : All servo off.

2-6. Memory Check

Display images are shown as follows, and all two screens are able to switch by the ↑ “R” key (UP) or ↓ “R” key (DW).

```
 EEPROM Data 1/2 CD   SL   L0   L1
 Focus  Gain     xx   xx   xx   xx
 Trk.   Gain     xx   xx   xx   xx
 Focus  Offset   xx   xx   xx   xx
 Trk.   Offset   xx   xx   xx   xx
 EQ.    Boost    xx   xx   xx   xx
 PI     Level    xx   xx   --   --
 Fcs. Balance    --   xx   --   --
 Jitter          xx   xx   xx   xx
 Mirror Time     xx   xx   xx   --
 FE Level        --   xx   --   --
 Traverse Lv1.   --   xx   --   --
 Next:DW Default:CLR    Exit:RET
```

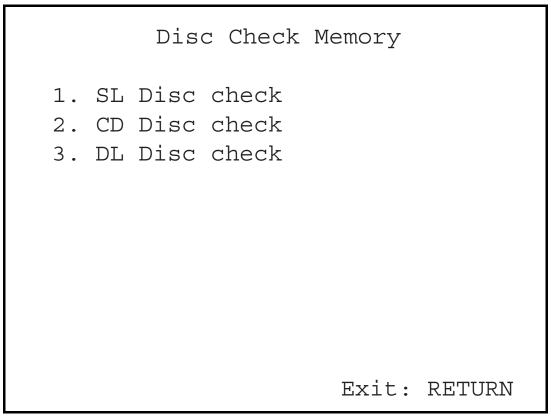


```
EEPROM Data 2/2      CDRW DVDRW
Focus Gain            xx    xx
Trk.  Gain            xx    xx
Focus Offset          xx    xx
Trk.  Offset          xx    xx
EQ.   Boost           xx    xx







Next:UP Default:CLR      Exit:RET
```

On this screen, current servo adjusted data stored in the EEPROM are displayed. The adjusted data are initialized by pressing the CLEAR "R" key, but be careful that they are not recoverable after initialization.

Before clearing the adjusted data, make a note of the set data. This screen will also appear if 0 All is selected in the Drive Auto Adjustment. In this case, default setting cannot be made.

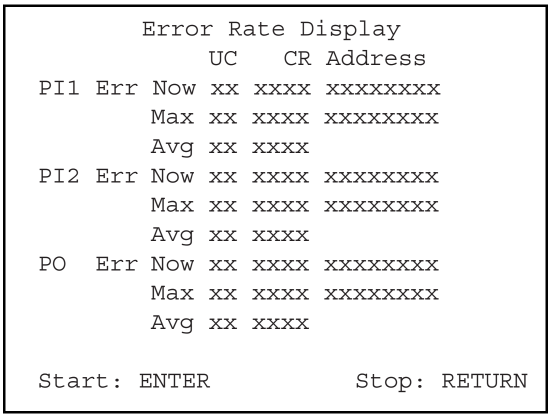
2-7. Disc Check Memory



```
        Disc Check Memory

 1. SL Disc check
 2. CD Disc check
 3. DL Disc check







                    Exit: RETURN
```

On this screen, measure the mirror time of chucked disc, and write to the EEPROM.

2-8. Error Rate Display

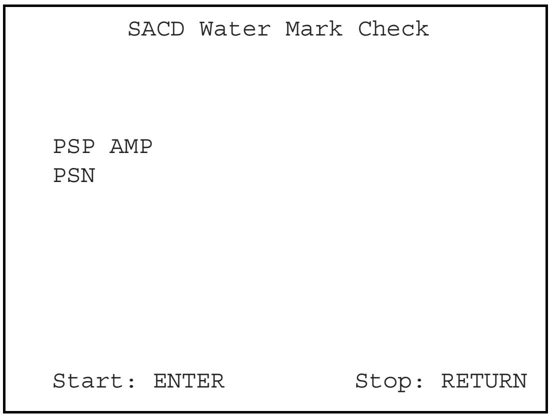


```
       Error Rate Display
            UC   CR Address
PI1 Err Now xx xxxx xxxxxxxx
        Max xx xxxx xxxxxxxx
        Avg xx xxxx
PI2 Err Now xx xxxx xxxxxxxx
        Max xx xxxx xxxxxxxx
        Avg xx xxxx
PO  Err Now xx xxxx xxxxxxxx
        Max xx xxxx xxxxxxxx
        Avg xx xxxx

Start: ENTER          Stop: RETURN
```

On this screen, measure and display the error rate.

UC : Incorrect value
CR : Correct value
Add: Address

2-9. SACD Water Mark Check



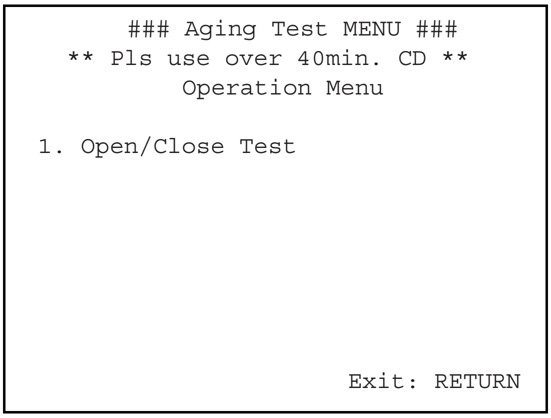
```
    SACD Water Mark Check



PSP AMP
PSN







Start: ENTER         Stop: RETURN
```

On this screen, measure the PSP AMP value and PSN value of SACD water mark.

3. MECHA AGING

On the Test Mode Menu screen, selecting 3 "R" displays the aging test menu.

Note: MECHA AGING is not available in this set.

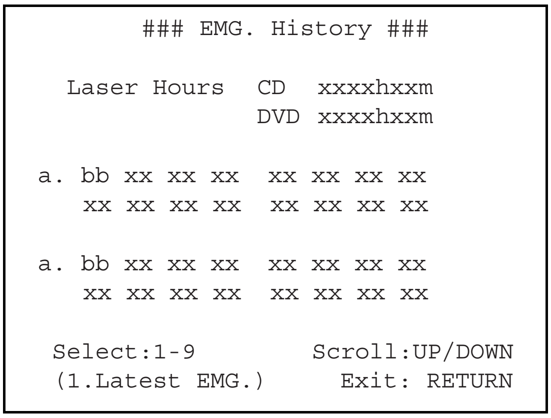


```
      ### Aging Test MENU ###
  ** Pls use over 40min. CD **
          Operation Menu

 1. Open/Close Test








                      Exit: RETURN
```

4. EMERGENCY HISTORY

On the Test Mode Menu screen, selecting 4 "R" displays the information such as servo emergency history.

The history information from last 1 up to 10 can be scrolled with the ↑ "R" key or ↓ "R" key. Also, specific information can be displayed by directly entering that number with ten keys.



```
       ### EMG. History ###

  Laser Hours   CD   xxxxhxxm
                DVD  xxxxhxxm

 a. bb xx xx xx  xx xx xx xx
    xx xx xx xx  xx xx xx xx

 a. bb xx xx xx  xx xx xx xx
    xx xx xx xx  xx xx xx xx

  Select:1-9        Scroll:UP/DOWN
  (1.Latest EMG.)      Exit: RETURN
```

xxxxhxxm : The laser on total hours. Data below minutes are omitted.
a. : Error number.
bb : Error code.
xx : Not used.

- Clearing History Information

Clearing laser hours:
Press the DISPLAY “R” and CLEAR “R” keys in thisorder.
Then both CD and DVD data are cleared.

Clearing emergency history:
Press the TOP MENU “R” and CLEAR “R” keys in this order.

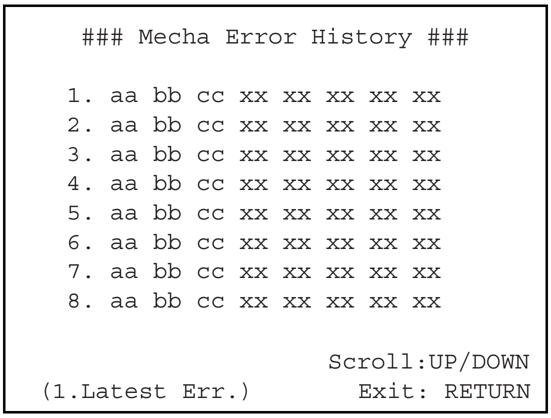
Initializing set up data:
Press MENU “R” and CLEAR “R” keys in this order. The data have been initialized when “EEPROM Initialize Finished.” message is displayed. The EMG. History screen will be restored soon.

- Code list of Emergency History

10: Communication to RF AMP (IC001) failed.
11: Each servo for focus, tracking, and spindle is unlocked.
12: Check sum error of EEPROM (IC204).
14: Communication to servo DSP (IC509) failed, or servo DSP (IC509) is faulty.
15: Communication to DVD decoder (IC701) failed, or DVD decoder (IC701) is faulty.
16: Communication to DSD decoder (IC801) failed, or DSD decoder (IC801) is faulty.
20: Initialization of sled servo failed. It is not placed in the initial position.
23: Sled servo operation error.
24: Made a request to move the sled servo to wrong position.
30: Tracking balance adjustment error.
31: Tracking gain adjustment error.
33: Focus bias adjustment error.
34: Focus gain adjustment error.
35: Equalizer adjustment error.
40: Focus servo does not operate.
41: With a DVD dual layer disc, focus jump failed.
50: CLV (spindle) servo does not operate.
51: Spindle does not stop.
60: Made a request to seek nonexistent address.
61: Seek error of retry more than regulated times.
70: Control data could not be read.
80: Disc reading failed.

5. MECHA ERROR HISTORY

On the Test Mode Menu screen, selecting 5 “R” displays the information of mechanism deck error history.
The history information from last 1 up to 8 can be scrolled with the ⬆ “R” key or ⬇ “R” key. Also, specific information can be displayed by directly entering that number with ten keys.



```
      ### Mecha Error History ###

        1. aa bb cc xx xx xx xx xx
        2. aa bb cc xx xx xx xx xx
        3. aa bb cc xx xx xx xx xx
        4. aa bb cc xx xx xx xx xx
        5. aa bb cc xx xx xx xx xx
        6. aa bb cc xx xx xx xx xx
        7. aa bb cc xx xx xx xx xx
        8. aa bb cc xx xx xx xx xx


                          Scroll:UP/DOWN
   (1.Latest Err.)          Exit: RETURN
```

aa: Initialization is completed or not.
FF : Complete.
other number : Not complete.

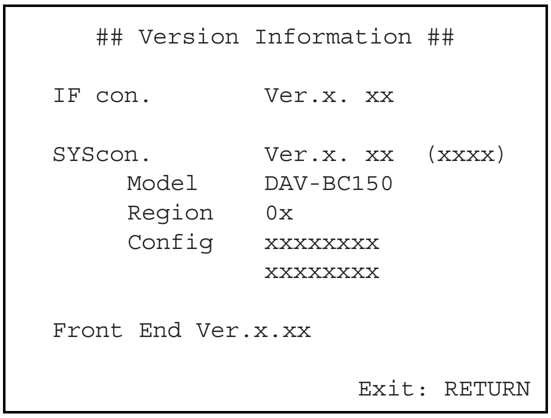
bb: Operating status of mechanism deck at an error occurred.
(lod sq jcp)
00 : Initializing.
10 to 15 : Open operating.
16 to 19 : Kicking cause open failed.
1A to 1F : Open operating.
20 to 27 : Complete the open operation.
28 : No disc and complete the open operation.
29 to 2F : Complete the open operation.
30 to 3F : Close requesting.
40 to 4F : Open requesting.
50 to 5F : Close operating.
60 to 6F : Complete the chucking operation.
80 to 8F : Complete the release operation. (BU is home position)
90 to 9F : BU down operating.
A0 to AF : Opening/closing the shutter. Or stationary state in open/close the shutter is enablement.
B0 to BF : BU up requesting.
C0 to CF : BU down requesting.
D0 to DF : BU upping.
E0 to EF : No disc checking in disc loading.

cc: Operating status of mechanism deck at an error occurred.
(lod oq jcp)
00 : Complete the operation.
10 to 1F : Open operating.
20 to 2F : Close operating.
30 to 3F : Release operating.
60 to 6F : Chucking operating.
70 to 7F : Kicking operating.
80 to 8F : Returning the BU to home position. (after kicking)

6. VERSION INFORMATION

On the Test Mode Menu screen, selecting 6 “R” displays the ROM version and region code.

The parenthesized hexadecimal number in version field is checksum value of ROM.



```
      ## Version Information ##

   IF con.        Ver.x. xx

   SYScon.        Ver.x. xx  (xxxx)
        Model     DAV-BC150
        Region    0x
        Config    xxxxxxxx
                  xxxxxxxx

   Front End Ver.x.xx

                             Exit: RETURN
```

IF con. : The version of system controller (IC509).
SYScon. : The version of DVD system processor (IC207).
Front End : The version of mechanism controller (IC901).

7. VIDEO LEVEL ADJUSTMENT

On the Test Mode Menu screen, selecting 7 “R” displays color bars for video level adjustment. During display of color bars, OSD disappears but the menu screen will be restored if pressing the RETURN ↶ “R” key.

SECTION 2
ELECTRICAL ADJSTMENT

DVD SECTION

AUTO SERVO ADJUSTMENT

After parts related to the servo circuit (RF amplifier (IC001), DSP (IC509), motor driver (IC501), EEPROM (IC903) so on) are replaced, re-adjusting the servo circuit is necessary. Select “ALL” at “1. DRIVE AUTO ADJUSTMENT” (Refer to page 4 in TEST MODE) and adjust DVD-SL (single layer), CD and DVD-DL (dual layer).

[TEST DISC LIST]

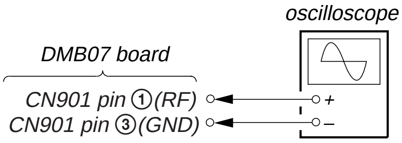
Use the following test disc on test mode.

TDV-520CSO (DVD-SL):	PART No. J-2501-236-A
LUV-P01 (CD):	PART No. 4-999-032-01
TDV-540C (DVD-DL):	PART No. J-2501-235-A

Note: Do not use exiting test disc for DVD.

[RFMON Level Check]

Connection:

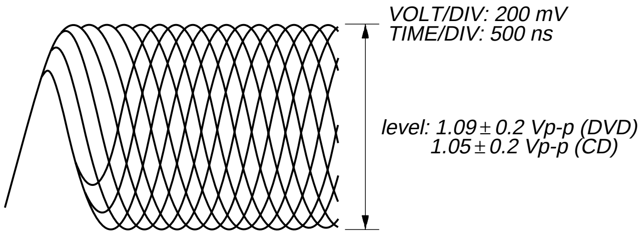

oscilloscope
DMB07 board
CN901 pin ①(RF)
CN901 pin ③(GND)
+
–

Procedure:

1. Connect an oscilloscope to CN901 pin ① (RF) and CN901 pin ③ (GND) on the SUB board.
2. Turn the power on.
3. Set the test disc (DVD: TDV-520CSO, CD: LUV-P01) on the tray and press ▷ button to playback.
4. Confirm that oscilloscope waveform is clear and check RFMON signal level is correct or not.

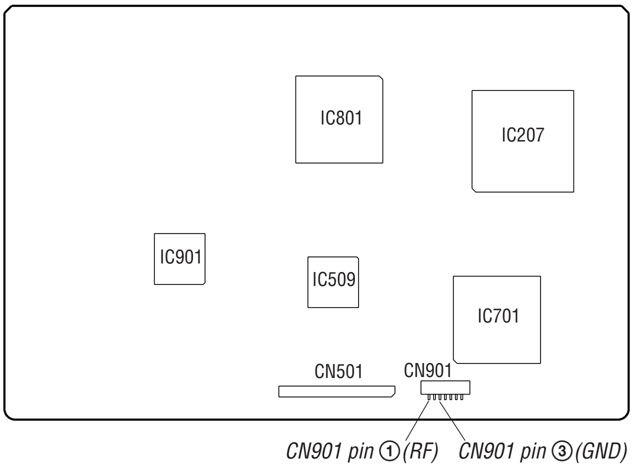
Note: A clear RFMON signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.

RFMON signal waveform



Checking Location: DMB07 board (Side A)

【DMB07 BOARD】 (Side A)


IC801
IC207
IC901
IC509
IC701
CN501
CN901
CN901 pin ①(RF)
CN901 pin ③(GND)

MEMO

HCD-BC150/BC250

SONY

US Model
Canadian Model

SERVICE MANUAL

Ver 1.2 2004.07

SUPPLEMENT-2

Subject: New type models

Note 1: New type models start with the following serial numbers.

MODEL		Initial Serial No.
DAV-BC150	US	8390001
	Canadian	4310001
DAV-BC250	US	8310001
	Canadian	4310001

9-877-956-82

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SECTION 1
SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output several times.

DISC SLOT LOCK

The disc slot lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure :

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set DVD function.
3. Insert a disc.
4. Press the ■ stick and the ⏏ (DISC1) button simultaneously for five seconds.
5. The message “LOCKED” is displayed and the slot is locked.

Releasing Procedure :

1. Press the ■ stick and the ⏏ (DISC1) button simultaneously for five seconds again.
2. The message “UNLOCKED” is displayed and the slot is unlocked.

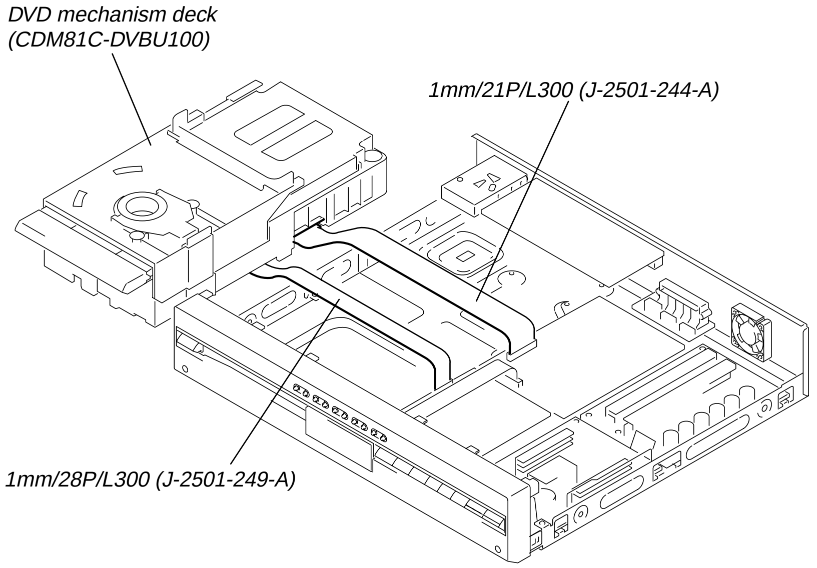
Note: When “LOCKED” is displayed, the slot lock is not released by turning power on/off with the I/⏻ button.

Note 1: Regarding the notification symbol “R”
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander (RM-SS250 supplied with the product). When a specific operation requires use of the operating buttons of the remote commander (RM-SS250), “R” is added to the specific operating procedure in this manual.
Example MENU/NO “R” The MENU/NO button of remote commander.

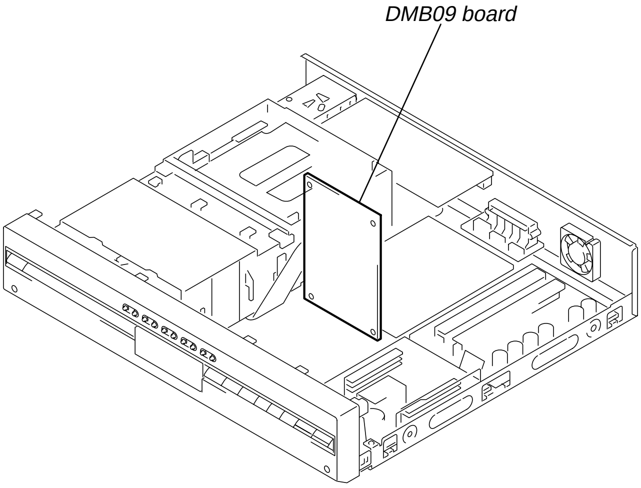
Note 2: Incorrect operations may be performed if the test mode ia not entered properly.
In this case, press the I/⏻ button to turn the power off, and retry to enter the test mode.

Note 3: If the disc tray does not open and the message “LOCKED” appears, press the ■ tick and the ⏏ (DISC1) button simultaneously for 5 seconds or longer.
Then remove your fingers from the above stick and the button.
The message “UNLOCKED” appears for 2 seconds and the disc tray opens.

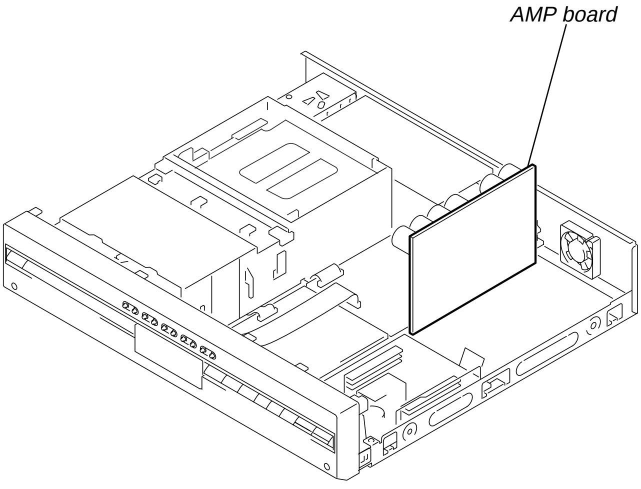
• SERVICE POSITION-1 (DVD MECHANISM DECK)



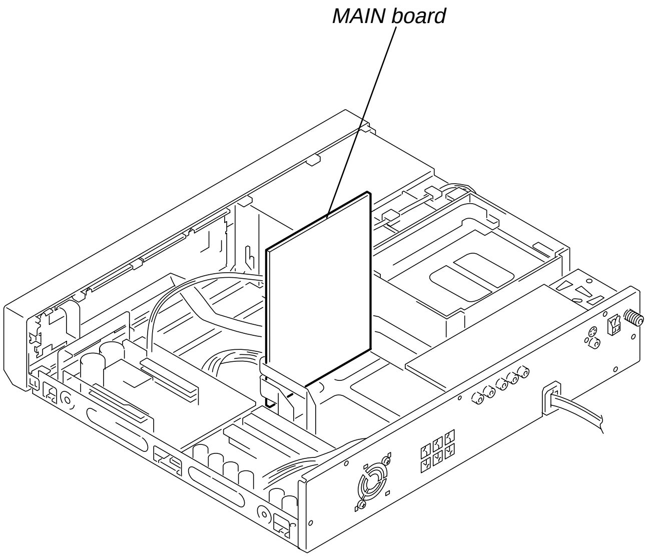
• SERVICE POSITION-2 (DMB09 BOARD)


DMB09 board

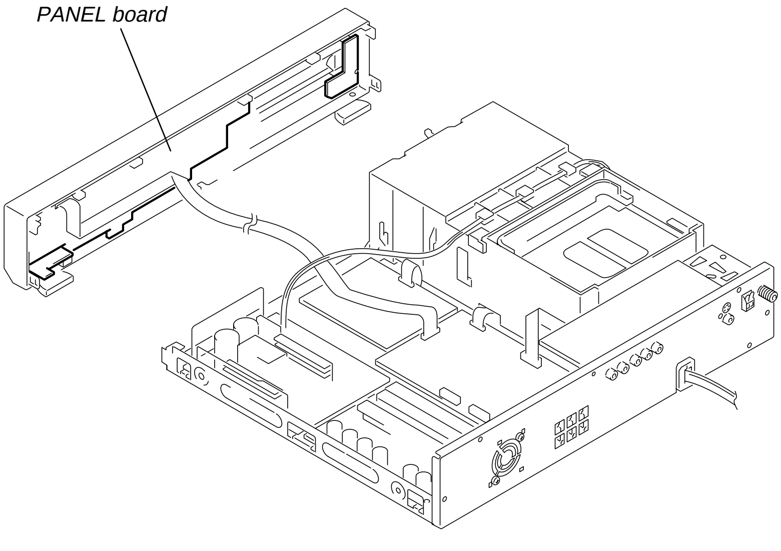
• SERVICE POSITION-3 (AMP BOARD)



• SERVICE POSITION-4 (MAIN BOARD)



• SERVICE POSITION-5 (PANEL BOARD)

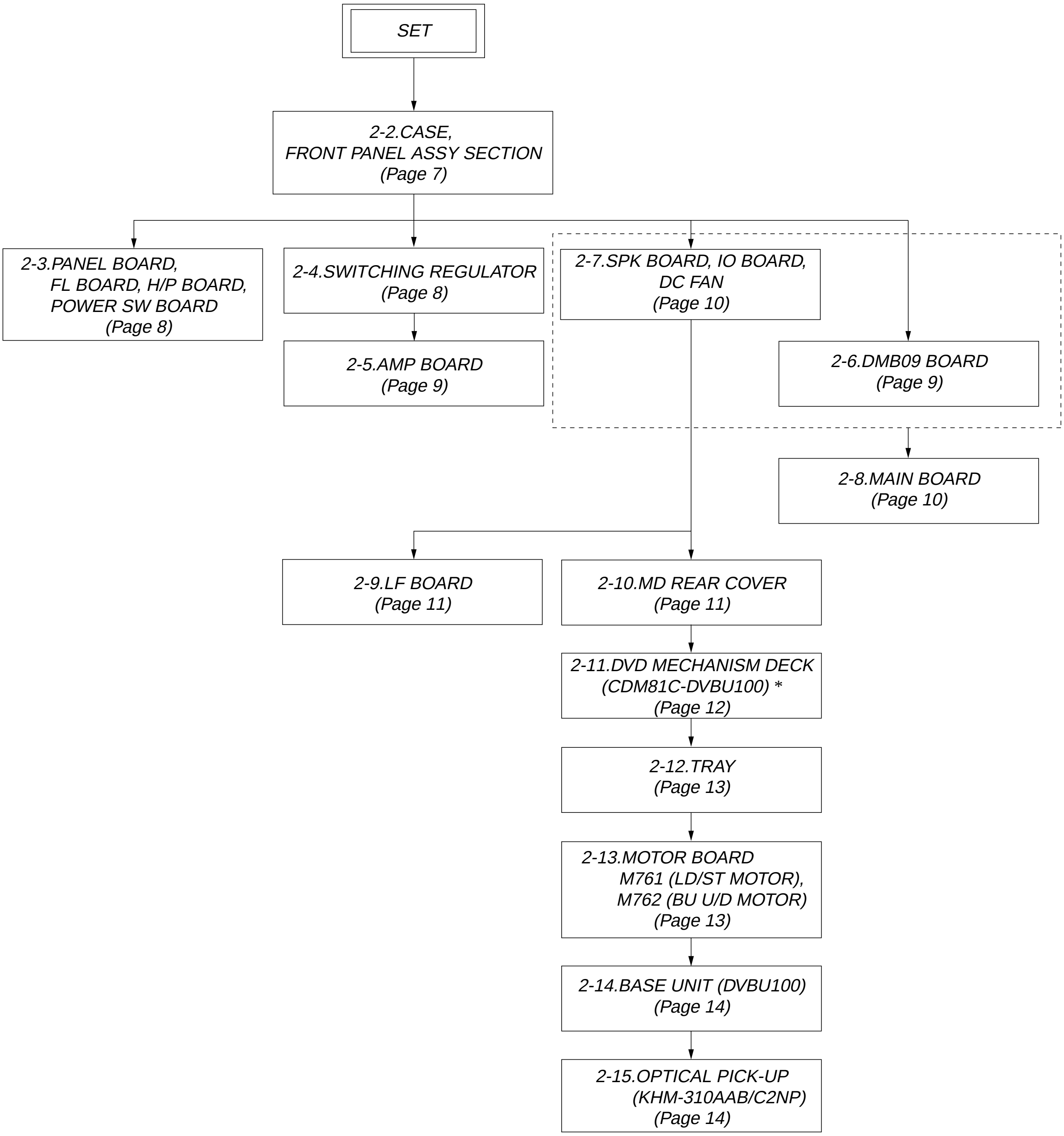

PANEL board

SECTION 2
DISASSEMBLY

2-1. DISASSEMBLY FLOW

- This set can be disassembled in the order shown below.
- The dotted square with arrow (⬚→) prompts you to move to the next job when all of the works within the dotted square (⬚) are completed.

* : In order to remove DVD MECHANISM DECK (CDM81C-DVBU100), please remove DMB09 BOARD beforehand.


SET
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2-4.SWITCHING REGULATOR (Page 8)
2-5.AMP BOARD (Page 9)
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2-6.DMB09 BOARD (Page 9)
2-8.MAIN BOARD (Page 10)
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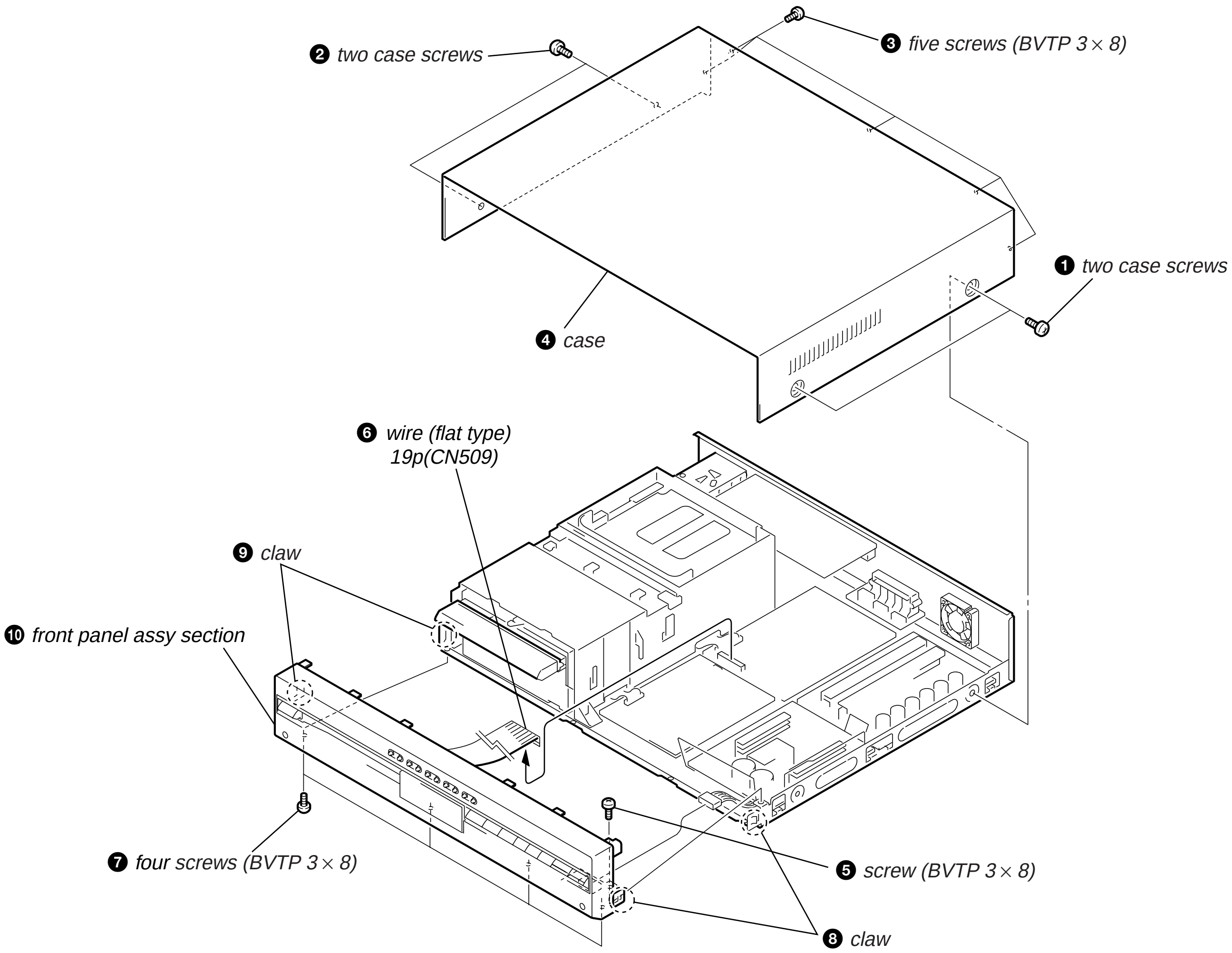
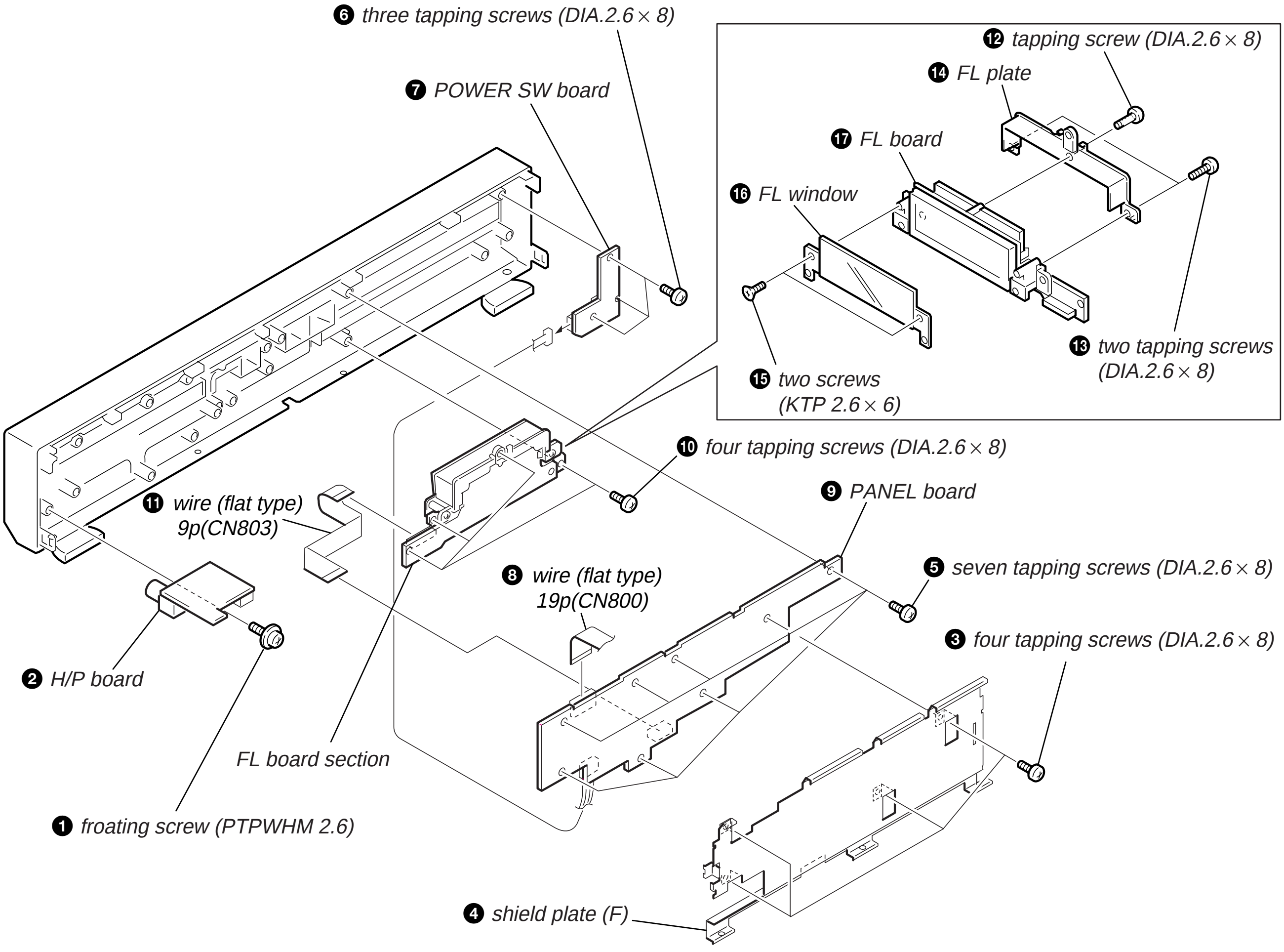
2-14.BASE UNIT (DVBU100) (Page 14)
2-15.OPTICAL PICK-UP (KHM-310AAB/C2NP) (Page 14)

Note: Follow the disassembly procedure in the numerical order given.

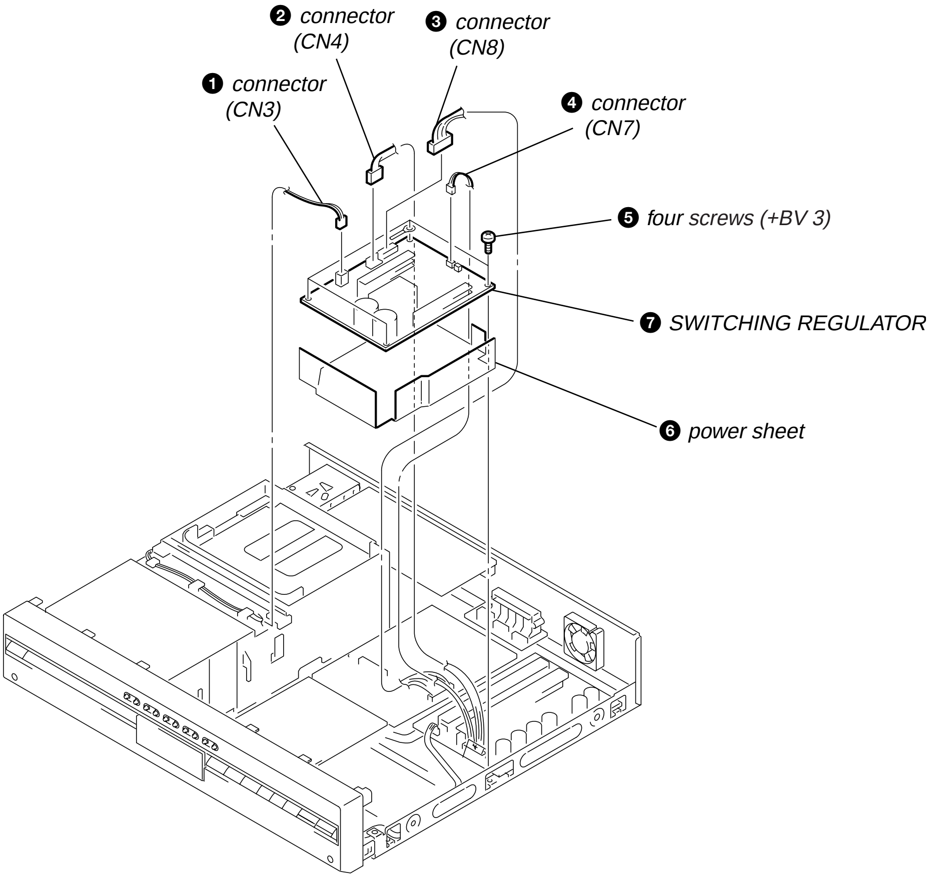
2-2. CASE, FRONT PANEL ASSY SECTION


❷ two case screws
❸ five screws (BVTP 3 × 8)
❶ two case screws
❹ case
❻ wire (flat type) 19p(CN509)
❾ claw
❿ front panel assy section
❼ four screws (BVTP 3 × 8)
❺ screw (BVTP 3 × 8)
❽ claw

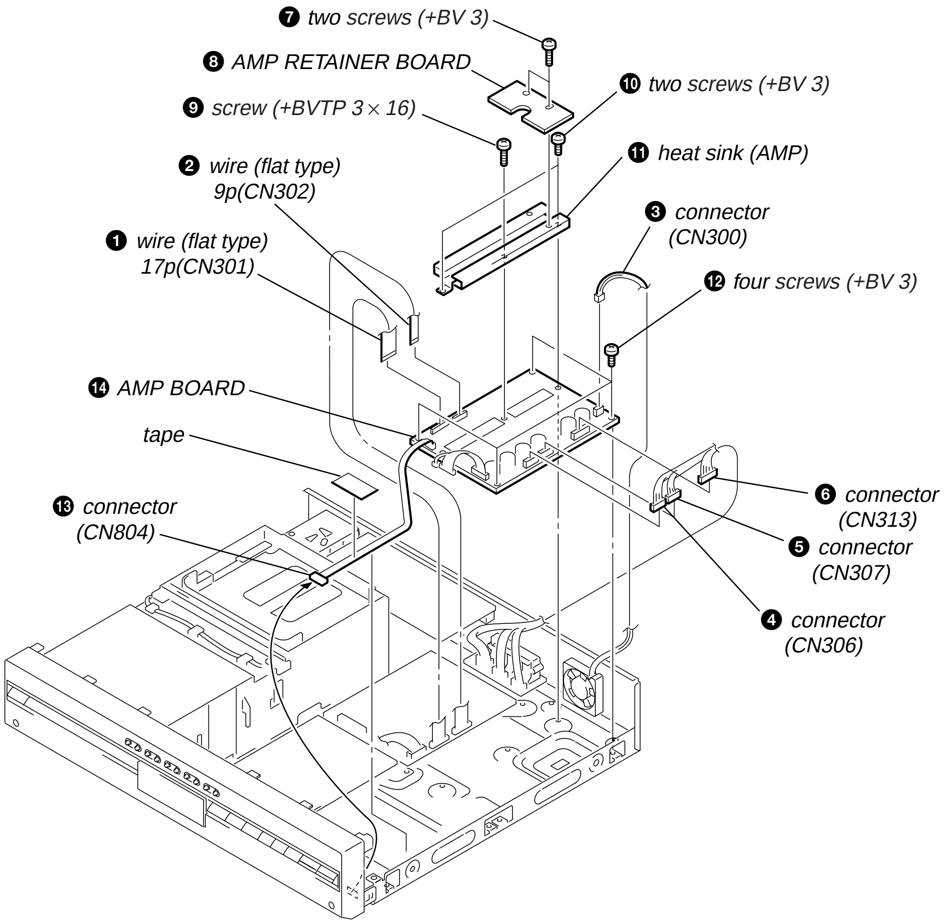
2-3. PANEL BOARD, FL BOARD, H/P BOARD, POWER SW BOARD


❻ three tapping screws (DIA.2.6 × 8)
❼ POWER SW board
⓬ tapping screw (DIA.2.6 × 8)
⓮ FL plate
⓱ FL board
⓰ FL window
⓭ two tapping screws (DIA.2.6 × 8)
⓯ two screws (KTP 2.6 × 6)
❿ four tapping screws (DIA.2.6 × 8)
⓫ wire (flat type) 9p(CN803)
❾ PANEL board
❺ seven tapping screws (DIA.2.6 × 8)
❽ wire (flat type) 19p(CN800)
❸ four tapping screws (DIA.2.6 × 8)
❷ H/P board
FL board section
❶ froating screw (PTPWHM 2.6)
❹ shield plate (F)

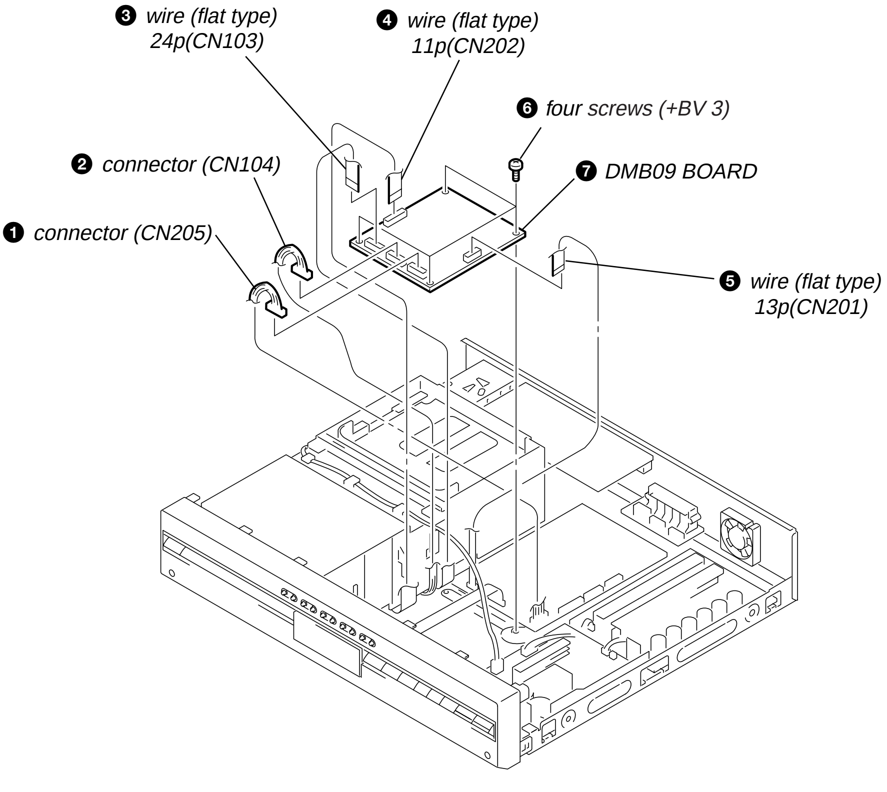
2-4. SWITCHING REGULATOR


❷ connector (CN4)
❸ connector (CN8)
❶ connector (CN3)
❹ connector (CN7)
❺ four screws (+BV 3)
❼ SWITCHING REGULATOR
❻ power sheet

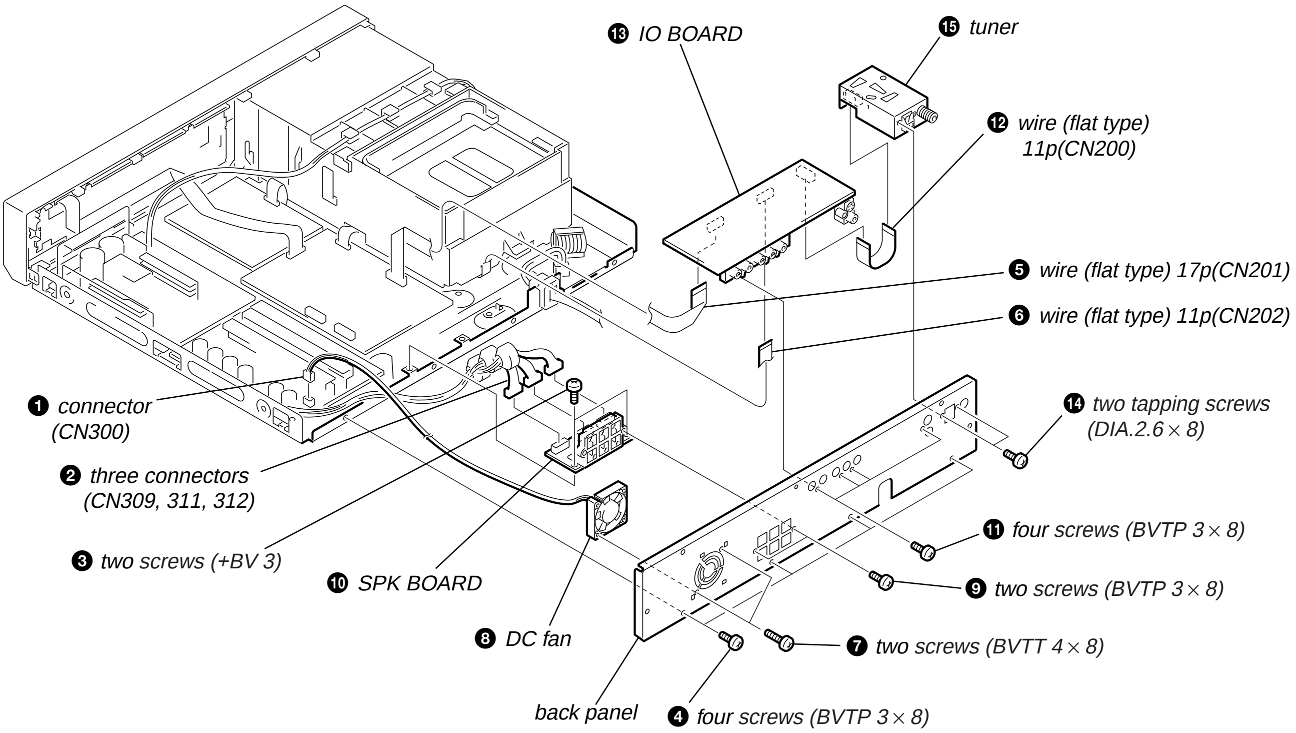
2-5. AMP BOARD


❼ two screws (+BV 3)
❽ AMP RETAINER BOARD
❿ two screws (+BV 3)
❾ screw (+BVTP 3 × 16)
⓫ heat sink (AMP)
❷ wire (flat type) 9p(CN302)
❸ connector (CN300)
❶ wire (flat type) 17p(CN301)
⓬ four screws (+BV 3)
⓮ AMP BOARD
tape
❻ connector (CN313)
⓭ connector (CN804)
❺ connector (CN307)
❹ connector (CN306)

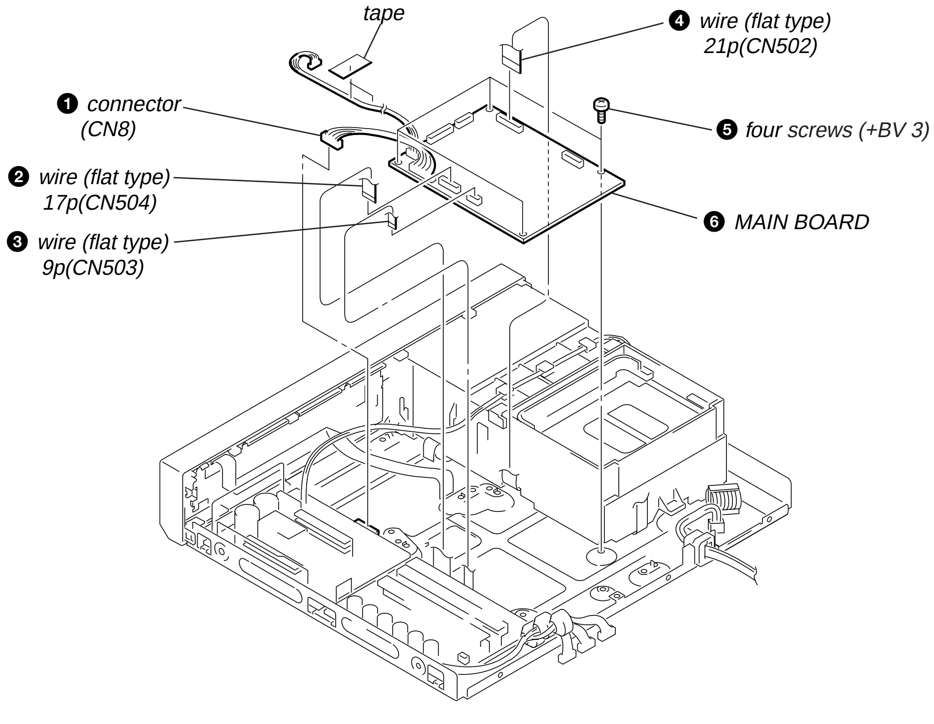
2-6. DMB09 BOARD


❸ wire (flat type) 24p(CN103)
❹ wire (flat type) 11p(CN202)
❻ four screws (+BV 3)
❷ connector (CN104)
❼ DMB09 BOARD
❶ connector (CN205)
❺ wire (flat type) 13p(CN201)

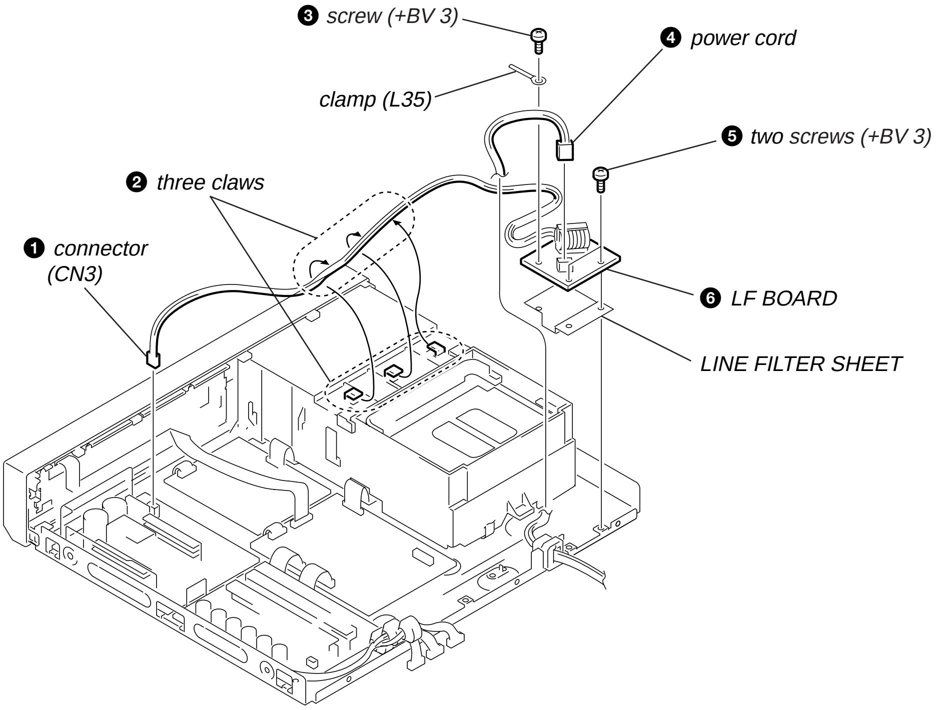
2-7. SPK BOARD, IO BOARD, DC FAN


⓭ IO BOARD
⓯ tuner
⓬ wire (flat type) 11p(CN200)
❺ wire (flat type) 17p(CN201)
❻ wire (flat type) 11p(CN202)
⓮ two tapping screws (DIA.2.6 × 8)
❶ connector (CN300)
❷ three connectors (CN309, 311, 312)
⓫ four screws (BVTP 3 × 8)
❸ two screws (+BV 3)
❿ SPK BOARD
❾ two screws (BVTP 3 × 8)
❽ DC fan
❼ two screws (BVTT 4 × 8)
back panel
❹ four screws (BVTP 3 × 8)

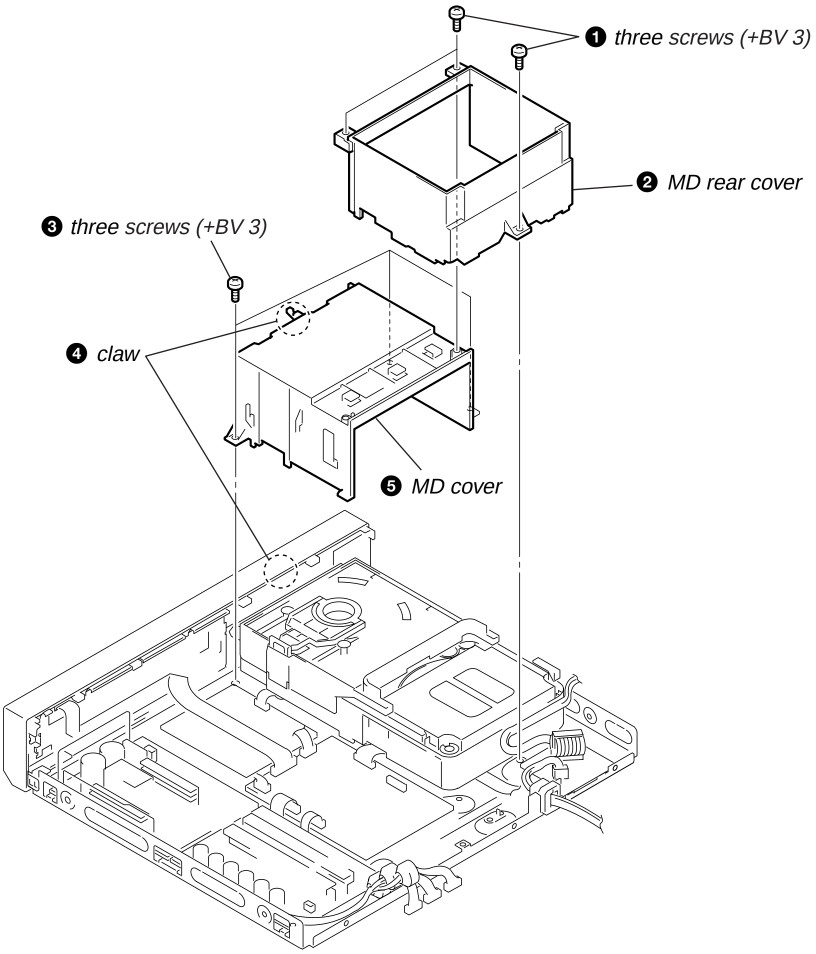
2-8. MAIN BOARD


tape
❹ wire (flat type) 21p(CN502)
❶ connector (CN8)
❺ four screws (+BV 3)
❷ wire (flat type) 17p(CN504)
❻ MAIN BOARD
❸ wire (flat type) 9p(CN503)

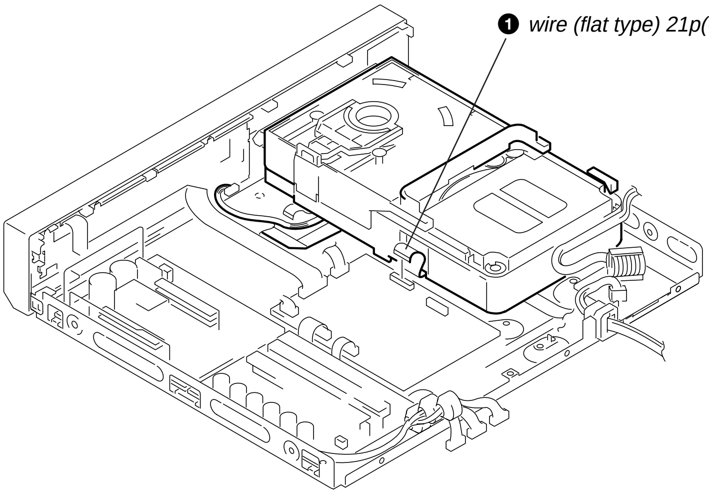
2-9. LF BOARD


❸ screw (+BV 3)
❹ power cord
clamp (L35)
❺ two screws (+BV 3)
❷ three claws
❶ connector (CN3)
❻ LF BOARD
LINE FILTER SHEET

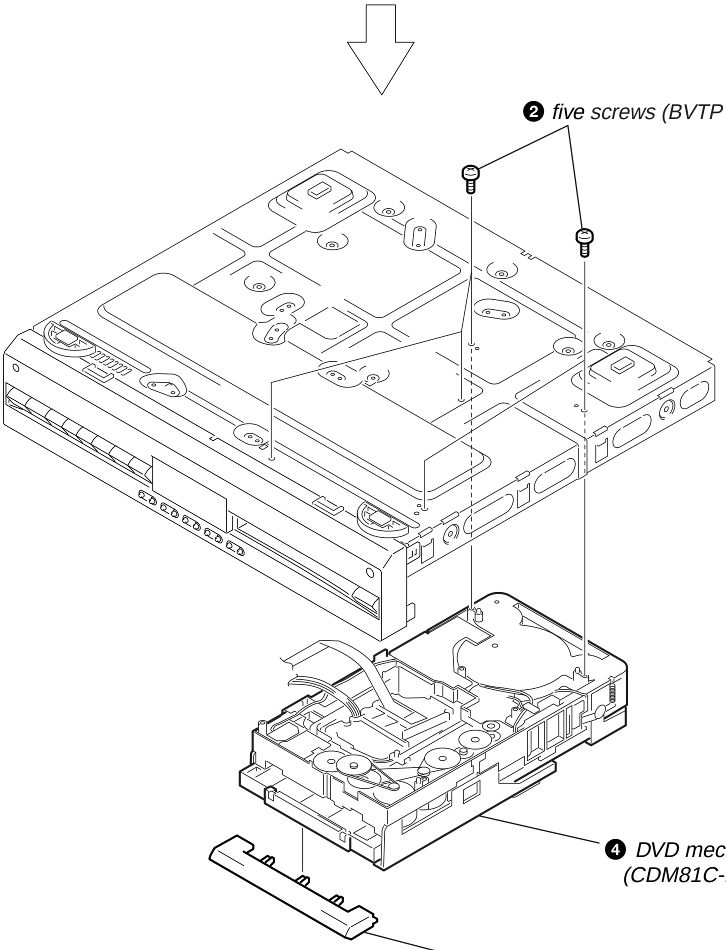
2-10. MD REAR COVER


❶ three screws (+BV 3)
❷ MD rear cover
❸ three screws (+BV 3)
❹ claw
❺ MD cover

2-11. DVD MECHANISM DECK (CDM81C-DVBU100)



❶ *wire (flat type) 21p(CN502)*

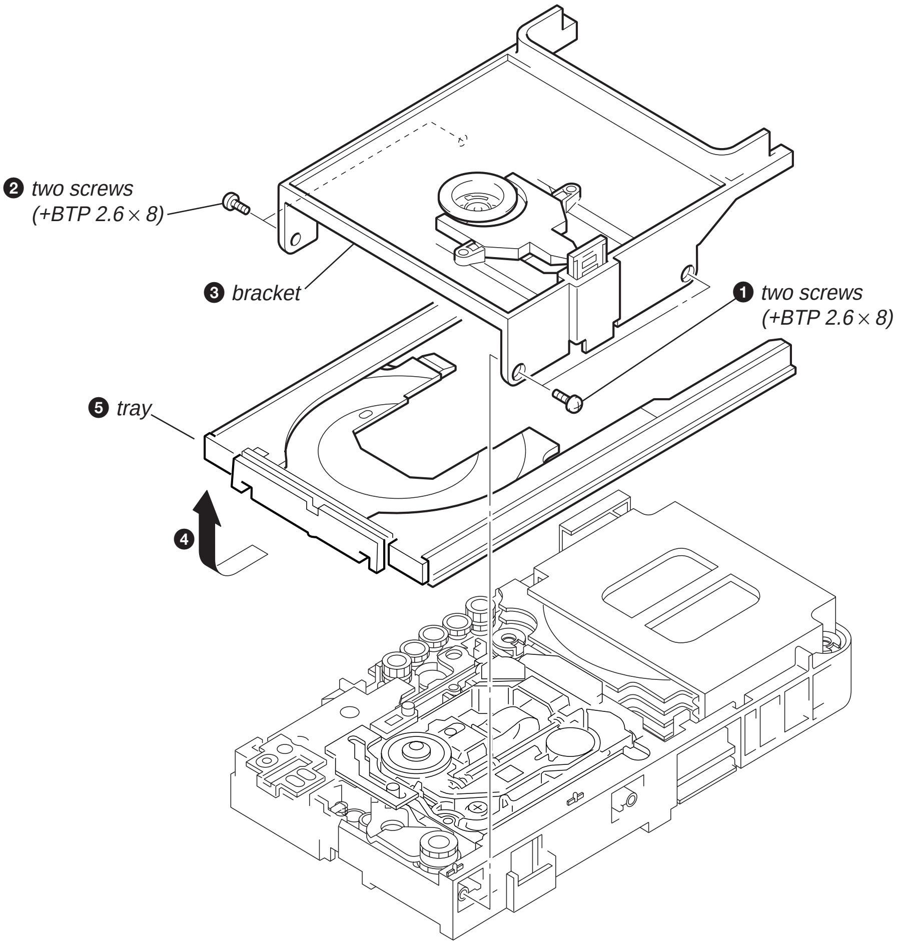


❷ *five screws (BVTP 3 × 8)*

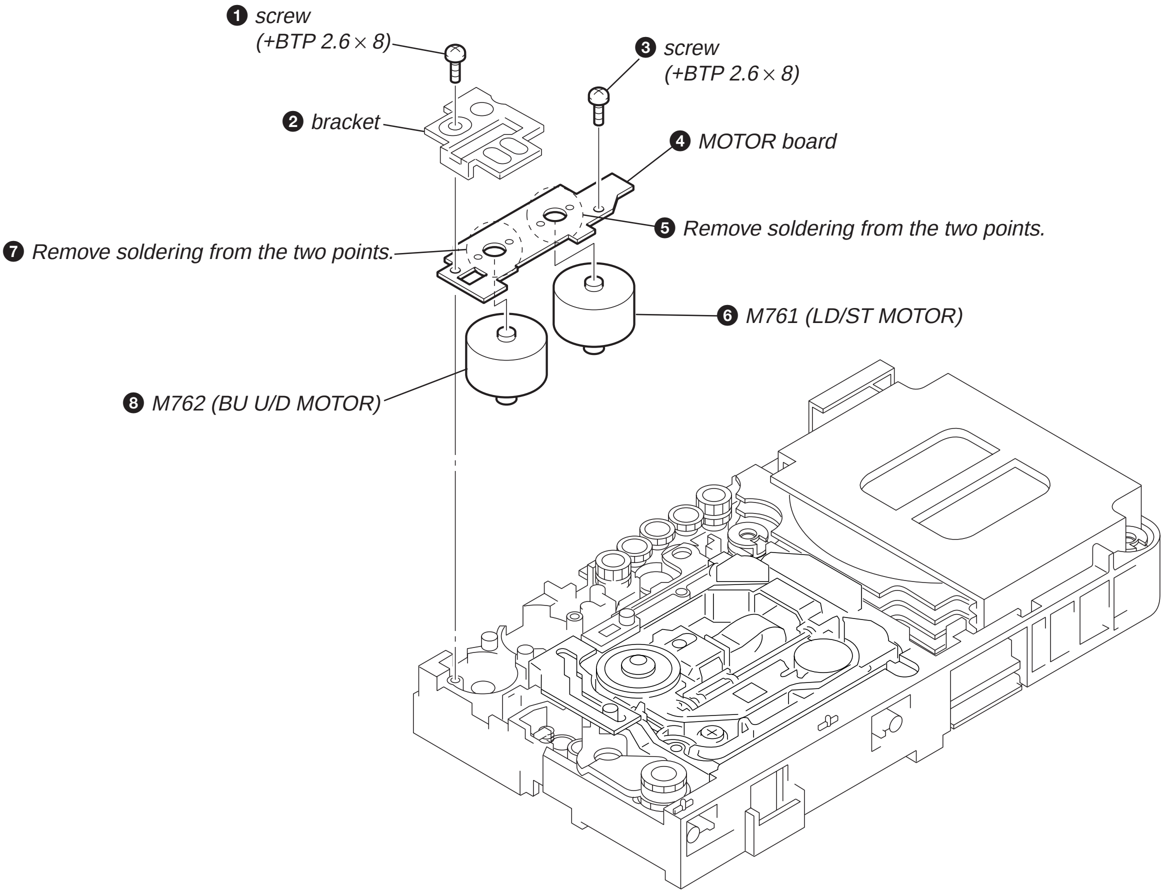
❹ *DVD mechanism deck (CDM81C-DVBU100)*

❸ *DVD lid*

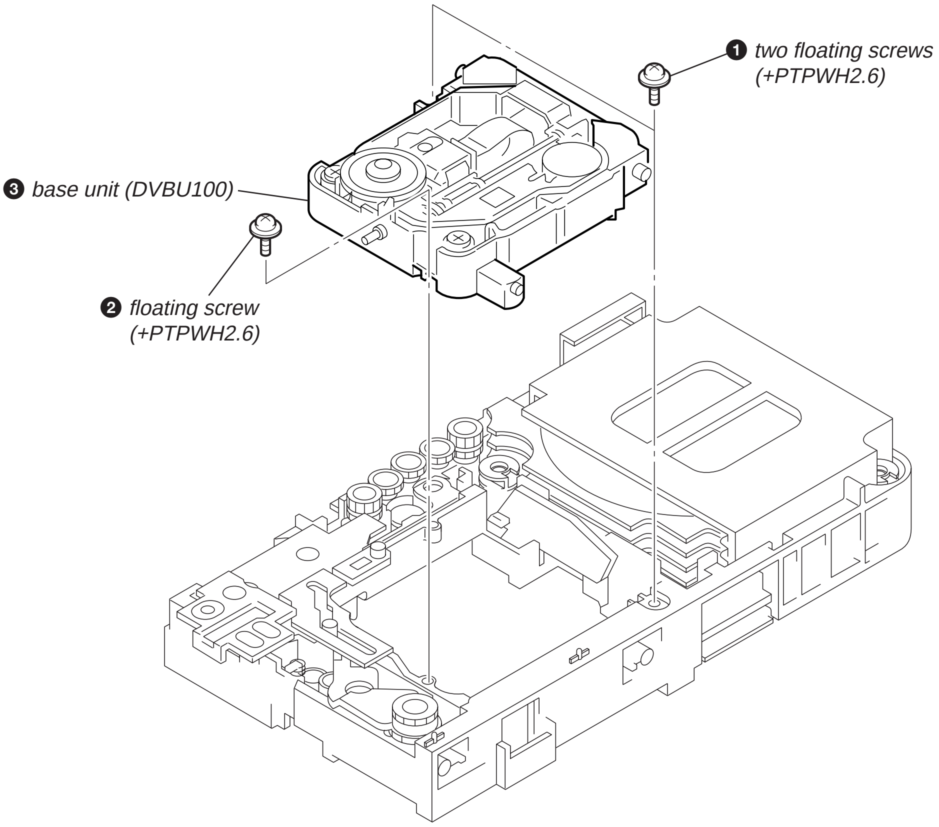
2-12. TRAY


❷ two screws
(+BTP 2.6 × 8)
❸ bracket
❶ two screws
(+BTP 2.6 × 8)
❺ tray
❹

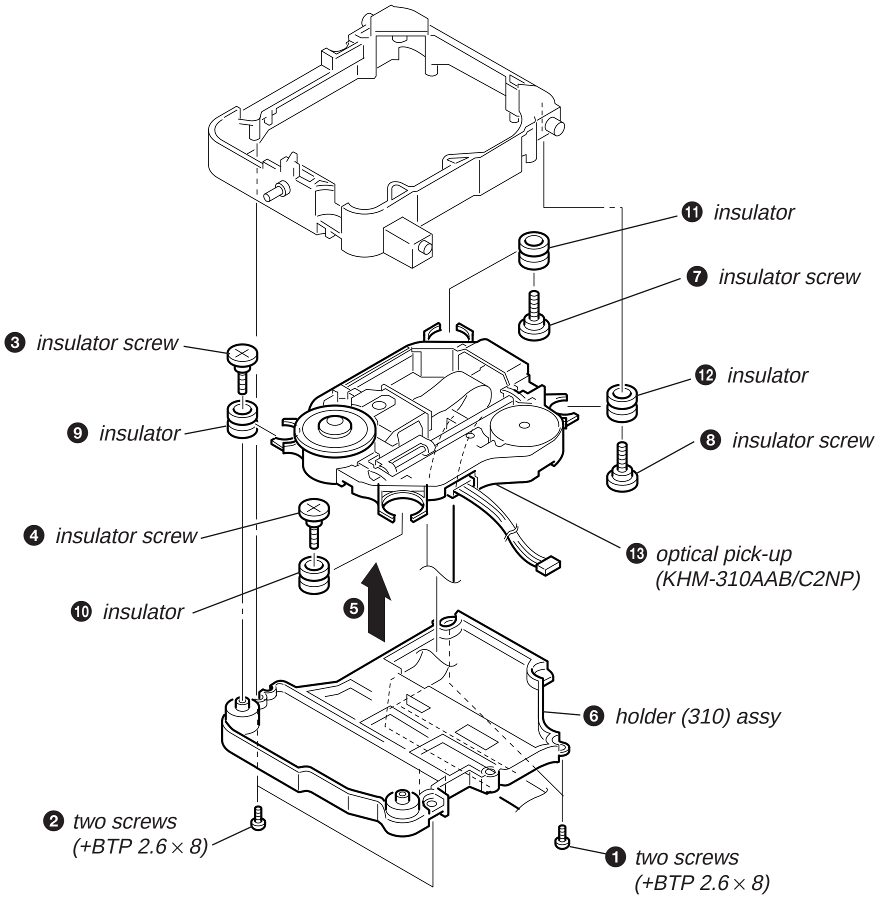
2-13. MOTOR BOARD, M761 (LD/ST MOTOR), M762 (BU U/D MOTOR)


❶ screw
(+BTP 2.6 × 8)
❸ screw
(+BTP 2.6 × 8)
❷ bracket
❹ MOTOR board
❺ Remove soldering from the two points.
❼ Remove soldering from the two points.
❻ M761 (LD/ST MOTOR)
❽ M762 (BU U/D MOTOR)

2-14. BASE UNIT (DVBU100)


❶ two floating screws
(+PTPWH2.6)
❸ base unit (DVBU100)
❷ floating screw
(+PTPWH2.6)

2-15. OPTICAL PICK-UP (KHM-310AAB/C2NP)


⓫ insulator
❼ insulator screw
❸ insulator screw
⓬ insulator
❾ insulator
❽ insulator screw
❹ insulator screw
⓭ optical pick-up
(KHM-310AAB/C2NP)
❿ insulator
❺
❻ holder (310) assy
❷ two screws
(+BTP 2.6 × 8)
❶ two screws
(+BTP 2.6 × 8)

SECTION 3
TEST MODE

Note 1: Regarding the notification symbol “R”
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander (RM-SS250 supplied with the product). When a specific operation requires use of the operating buttons of the remote commander (RM-SS250), “R” is added to the specific operating procedure in this manual. Example MENU/NO “R” The MENU/NO button of remote commander.

Note 2: Incorrect operations may be performed if the test mode is not entered properly.
In this case, press the I/⏻ button to turn the power off, and retry to enter the test mode.

1. Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customers.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons ⏭, ▷ and ⏏ (DISC1) simultaneously.
3. When this button is operated, display as “Cold RESET” for a while and all of the settings are reset.

2. Panel Test Mode

- This mode is used to check the software version, LCD, LED and keyboard.

2-1. DVD LED Test Mode

Procedure:

1. Press the I/⏻ button to turn on the power.
2. Press three bottons VOLUME –, ⏮ and ⏏ (DISC1) simultaneously.
3. When the display LED test mode is activated, all segments are turned on.
4. To exit from this mode, press the I/⏻ button.

2-2. Version Test Mode

Procedure:

1. Press the I/⏻ button to turn the power on.
2. To enter the version test mode, press three buttons VOLUME –, VOLUME + and ⏏ (DISC1) simultaneously.
3. Whenever press the ⏭ button, the version is displayed in order of STR and DVD.
4. To exit from this mode, press the I/⏻ button.

2-3. Key Test Mode

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press three buttons VOLUME –, VOLUME + and the FUNCTION simultaneously.
3. To enter the KEY test mode, the fluorecent indicator displays “KEY 0”. Each time a button is pressed, “KEY” value increases. However, once a button is pressed, it is no longer taken into account. When all keys are pressed correctly, “KEY 19” is displayed.
4. To exit from this mode, pull out the AC plug.

3. Disc Tray Lock

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure :

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set DVD function.
3. Insert a disc.
4. Press the ■ button and the ⏏(DISC1) button simultaneously for five seconds.
5. The message “LOCKED” is displayed and the tray is locked.

Releasing Procedure :

1. Press the ■ button and the ⏏(DISC1) button simultaneously for five seconds. again.
2. The message “UNLOCKED” is displayed and the tray is unlocked.

Note: When “LOCKED” is displayed, the slot lock is not released by turning power on/off with the I/⏻ button.

4. DVD Ship Mode

- Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set the function “DVD”.
3. Press three buttons ⏮, ⏏ (DISC1) and ⏭ simultaneously.
4. After a message “MECH LOCK” is displayed on the fluorescent indicator tube, pull out the AC plug.
5. To exit from this mode, press the I/⏻ button to turn the set on.

5. DVD Debug In Mode

Procedure:

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set the function “DVD”.
3. Press the three buttons VOLUME +, ⏏ (DISC1) and ⏭ simultaneously.
4. To exit from this mode, press the I/⏻ button to turn the set on.

DVD SECTION

3-1. GENERAL DESCRIPTION

The Mirror Time and IOP measurement allows you to make diagnosis and adjustment simply by using the remote commander and monitor TV. The instructions, diagnosis results, etc. are given on the on screen display (OSD).

The Mirror Time and IOP measurement is required is such events where servicing a DVD-Player includes changing the Base Unit (BU). For each new BU to be used with a certain MV-044 board, Mirror Time and IOP measurement need to be carried out.

3-2. STARTING TEST MODE

Press three buttons ■ , ⏏(DISC1) and I/⏻ simultaneously with the DVD player in standby mode.
The Test Mode starts, then the menu shown below will be displayed on the TV screen.

```
        Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History
4. Version Information
5. Video Level Adjustment

Model Name : DPX-xxxx_xx
IF-con     : Ver. x.xxx (xxxx)
```

The menu above is the Remocon Diagnosis Menu screen which consists of six main function. At the bottom of the menu screen, the model name and IF-con version. To enter Mirror Time Adjustment menu, press button 2 on the remote commander to enter Drive Manual Operation menu. To exit from the Test Mode, press the power button on the remote commander.

3-3. DRIVE MANUAL OPERATION

The Drive Manual Operation menu consists of five main function. By pressing 2 on the remote commander in the Remocon Diagnosis Menu, the screen will appear as below.

```
        Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Mecha Test Mode
5. Mirr Time Adjust
0. Return to Top Menu
```

3-4. MIRROR TIME ADJUSTMENT

To enter Mirror Time Adjustment, press 5 on the remote commander. The screen will appear as below.

```
          Mirr time Adjust Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:
4. Save to EEPROM
5. Default set MIRR time

[Open] Tray open [Close] Tray close
[0] Return to previous menu
```

There are five main commands in the Mirr time Adjust menu as shown in the figure above. The functions of each command are described in the following page.

1. CD Mirr time Check
This command checks the Mirror time value for CD disc.

2. DVD Mirr time Check
This command checks the Mirror time value for DVD disc.

3. Threshold
This command displays the threshold value between CD and DVD mirror time.

4. Save to EEPROM
This command saves an adjusted mirror time value to the EEPROM.

5. Default set MIRR time
This command will set CD and DVD mirror time to firmware default value.

[Open] / [Close]
Pressing the Open / Close button controls the tray for disc change during mirror time adjustment.
[0] Return to previous menu
Press [0] button to return to previous menu.

3-4-1. EXECUTING MIRROR TIME ADJUSTMENT

In order to execute mirror time adjustment, the following standard procedures must be followed.

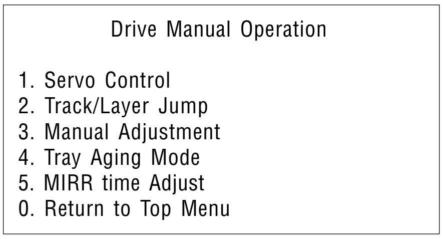
(1) In standby mode, press three buttons ■ , ⏏(DISC1) and I/⏻ simultaneously.
(2) Select “2. Drive Manual Operation”.

```
        Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model      : DPX-xxxx_xx
IF-con     : Ver. x.xxx (xxxx)
Syscon     : Ver. x.xxx
```

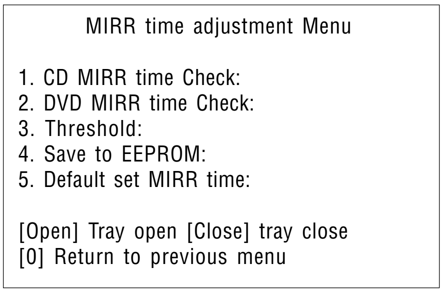
(3) Select “5. MIRR time Adjust”.



```
          Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Tray Aging Mode
5. MIRR time Adjust
0. Return to Top Menu
```

(4) Select “5. Default set MIRR time”.



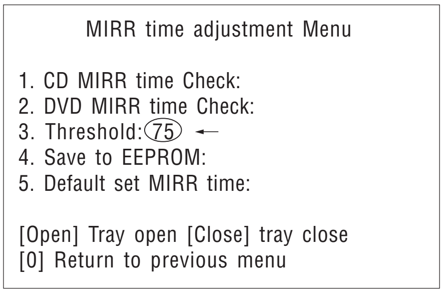
```
       MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [Close] tray close
[0] Return to previous menu
```

(5) Select “3. Threshold”.

(6) Confirm the number. If it is 75, go to next step. If it is any other value, return to step 4.



```
       MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:75
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [Close] tray close
[0] Return to previous menu
```

(7) Push “Open/Close” key to eject tray.

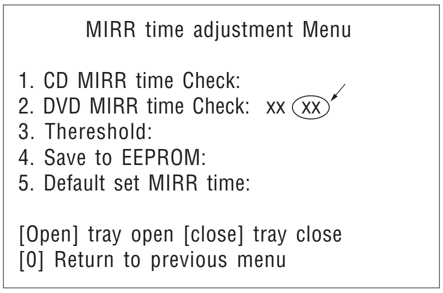
(8) Insert Test Disc HLX-504 into tray.

(9) Push “Open/Close” key to close tray.

(10) Push “2. DVD MIRR time Check”.

(11) Wait for HEX number to display.

(12) Confirm the number, if XX is 28 ~ 70, proceed with next step. If no, return to 8.



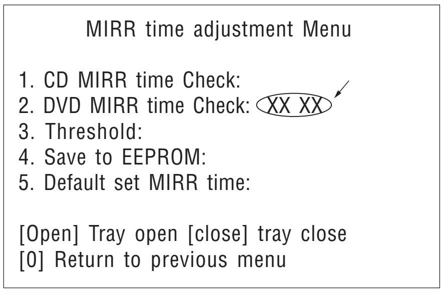
```
       MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:  xx xx
3. Thereshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] tray open [close] tray close
[0] Return to previous menu
```

(13) Push “4. Save to EEPROM”.

(14) Confirm the same values are displayed. If it is not same, return to step 7.



```
       MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check: XX XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] tray close
[0] Return to previous menu
```

(15) Push “Open/Close” key to eject tray.

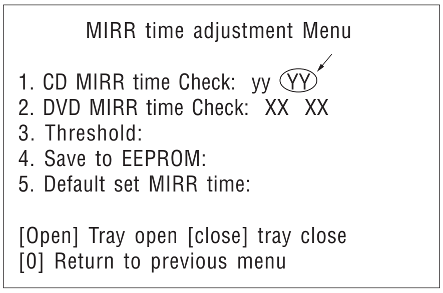
(16) Take out HLX-504 and insert Test Disc YEDS-18 into tray.

(17) Push “Open/Close” key to close tray.

(18) Push “1. CD MIRR time check”.

(19) Wait for HEX number to display.

(20) Confirm the number, if YY is 5A ~ E8, proceed with next step. If no, return to 15.



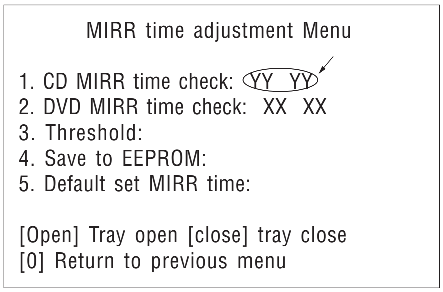
```
       MIRR time adjustment Menu

1. CD MIRR time Check:  yy YY
2. DVD MIRR time Check:  XX  XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] tray close
[0] Return to previous menu
```

(21) Push “4. Save to EEPROM”.

(22) Confirm the same values are displayed. If it is not the same, return to step 15.



```
       MIRR time adjustment Menu

1. CD MIRR time check: YY  YY
2. DVD MIRR time check:  XX  XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] tray close
[0] Return to previous menu
```

(23) Push “Open/Close” key to eject tray.

(24) Remove Test Disc YEDS-18 from tray.

(25) Push “Open/Close” key to close tray.

(26) Press “0” to return to the Drive Manual Operation menu.

(27) Press “0” to return to the Remocon Diagnosis Menu.

(28) Press power button to switch OFF set.

3-5. EXECUTING IOP MEASUREMENT

In order to execute mirror time adjustment, the following standard procedures must be followed.

(1) In standby mode, press three buttons ■ , ⏏(DISC1) and I/⏻ simultaneously.

```
           Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model         : DPX-1790_UC2
IF-con  Ver   : 1.000 (5B84)
Syscon  Ver   : 1.81
```

(2) Select “2. Drive Manual Operation” by pressing the 2 key on the remote commander. The screen will appear as below.

```
           Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Tray Aging Mode
5. MIRR time adjust
0. Return to top Menu
```

(3) Select “3. Manual Adjustment” by pressing the 3 key on the remote commander. The screen will appear as below.

```
               Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eg boost Adjust:
6. Iop:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

↓ ↑  Change Value
[RETURN] Return to previous menu
```

(4) Select Iop by pressing 6 key on the remote commander.

(5) Wait until a hexadecimal number appear.

```
               Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eq Boost Adjust:
6. Iop:ED 9E:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

Change Value
[0] Return to previous menu
```

(6) Convert each data from hexadecimal to decimal using conversion table.

(7) Substract between these two values.

(8) If the remainder is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then the BU is defective and need to be change.

(9) Press RETURN to return back to previous menu.

(10) Press 0 to return to Top Menu and power OFF the DVD Player.

SECTION 4
ELECTRICAL ADJSTMENT

DVD SECTION

[TEST DISC LIST]

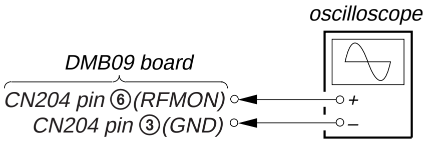
Use the following test disc on test mode.

1) CD reference disc
   YEDS-18 (3-702-101-01)
   PATD-012 (4-225-203-01)
2) DVD reference disc
   HLX-501 (J-6090-071-A) (dual layer) (NTSC)
   HLX-503 (J-6090-069-A) (single layer) (NTSC)
   HLX-504 (J-6090-088-A) (single layer) (NTSC)
   HLX-505 (J-6090-089-A) (dual layer) (NTSC)

Note: Do not use exiting test disc for DVD.

[RFMON Level Check]

Connection:

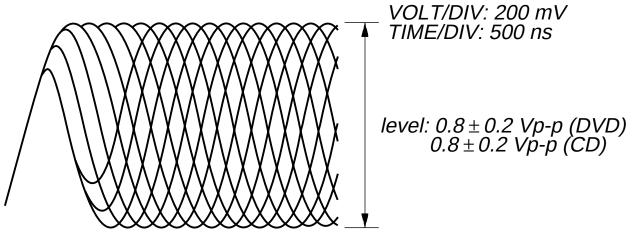


Procedure:

1. Connect an oscilloscope to CN204 pin ⑥ (RFMON) and CN204 pin ③ (GND) on the DMB09 board.
2. Turn the power on.
3. Set the test disc (DVD: TDV-520CSO, CD: LUV-P01) on the tray and press ▷ button to playback.
4. Confirm that oscilloscope waveform is clear and check RFMON signal level is correct or not.

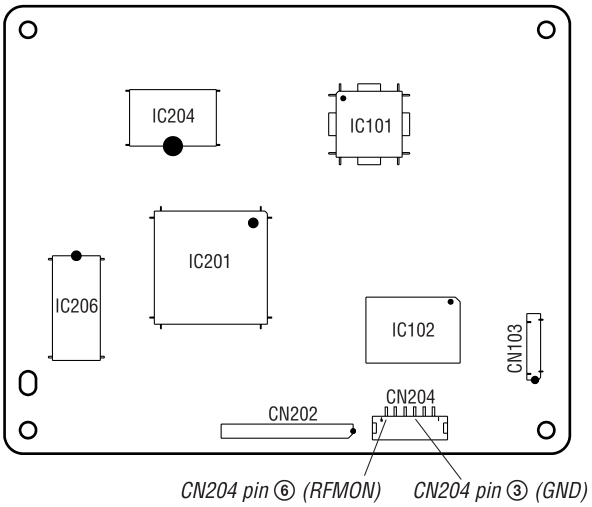
Note: A clear RFMON signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RFMON signal waveform



Checking Location: DMB09 board (Side A)

【DMB09 BOARD】(SIDE A)

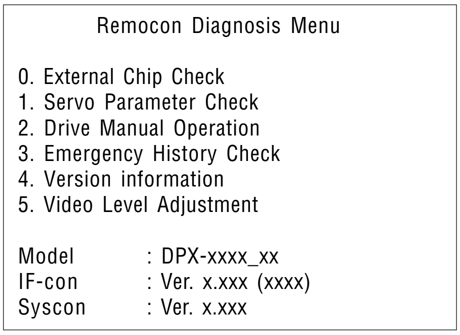


[MIRROR TIME ADJUSTMENT]

In order to execute mirror time adjustment, the following standard procedures must be followed.

(1) In standby mode, press three buttons ■ , ⏏(DISC1) and I/⏻ simultaneously.

(2) Select "2. Drive Manual Operation".

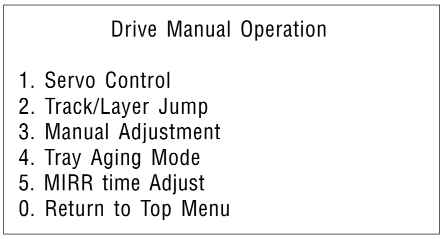


```
Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model     : DPX-xxxx_xx
IF-con    : Ver. x.xxx (xxxx)
Syscon    : Ver. x.xxx
```

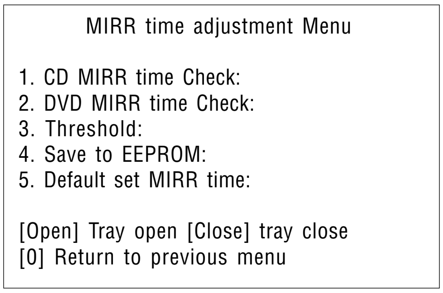
(3) Select "5. MIRR time Adjust".



```
Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Tray Aging Mode
5. MIRR time Adjust
0. Return to Top Menu
```

(4) Select "5. Default set MIRR time".



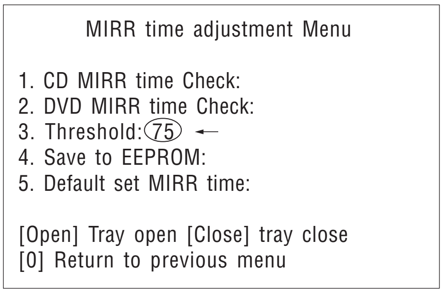
```
MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [Close] tray close
[0] Return to previous menu
```

(5) Select "3. Threshold".

(6) Confirm the number. If it is 75, go to next step. If it is any other value, return to step 4.



```
MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:
3. Threshold:(75) ←
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [Close] tray close
[0] Return to previous menu
```

(7) Push "Open/Close" key to eject tray.

(8) Insert Test Disc HLX-504 into tray.

(9) Push "Open/Close" key to close tray.

(10) Push "2. DVD MIRR time Check".

(11) Wait for HEX number to display.

(12) Confirm the number, if XX is 28 ~ 70, proceed with next step. If no, return to 8.

```
          MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check:  xx XX
3. Thereshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] tray open [close] tray close
[0] Return to previous menu
```

(13) Push “4. Save to EEPROM”.

(14) Confirm the same values are displayed. If it is not same, return to step 7.

```
          MIRR time adjustment Menu

1. CD MIRR time Check:
2. DVD MIRR time Check: XX XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] tray close
[0] Return to previous menu
```

(15) Push “Open/Close” key to eject tray.

(16) Take out HLX-504 and insert Test Disc YEDS-18 into tray.

(17) Push “Open/Close” key to close tray.

(18) Push “1. CD MIRR time check”.

(19) Wait for HEX number to display.

(20) Confirm the number, if YY is 5A ~ E8, proceed with next step. If no, return to 15.

```
          MIRR time adjustment Menu

1. CD MIRR time Check:  yy YY
2. DVD MIRR time Check:  XX  XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] tray close
[0] Return to previous menu
```

(21) Push “4. Save to EEPROM”.

(22) Confirm the same values are displayed. If it is not the same, return to step 15.

```
          MIRR time adjustment Menu

1. CD MIRR time check: YY  YY
2. DVD MIRR time check:  XX  XX
3. Threshold:
4. Save to EEPROM:
5. Default set MIRR time:

[Open] Tray open [close] tray close
[0] Return to previous menu
```

(23) Push “Open/Close” key to eject tray.

(24) Remove Test Disc YEDS-18 from tray.

(25) Push “Open/Close” key to close tray.

(26) Press “0” to return to the Drive Manual Operation menu.

(27) Press “0” to return to the Remocon Diagnosis Menu.

(28) Press power button to switch OFF set.

[IOP MEASUREMENT]

In order to execute mirror time adjustment, the following standard procedures must be followed.

(1) In standby mode, press three buttons ■ , ⏏(DISC1) and I/⏻ simultaneously.

```
Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model        : DPX-1790_UC2
IF-con  Ver  : 1.000 (5B84)
Syscon  Ver  : 1.81
```

(2) Select “2. Drive Manual Operation” by pressing the 2 key on the remote commander. The screen will appear as below.

```
Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Tray Aging Mode
5. MIRR time adjust
0. Return to top Menu
```

(3) Select “3. Manual Adjustment” by pressing the 3 key on the remote commander. The screen will appear as below.

```
Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eg boost Adjust:
6. Iop:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

↓↑ Change Value
[RETURN] Return to previous menu
```

(4) Select Iop by pressing 6 key on the remote commander.

(5) Wait until a hexadecimal number appear.

```
Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eq Boost Adjust:
6. Iop:ED 9E
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

Change Value
[0] Return to previous menu
```

(6) Convert each data from hexadecimal to decimal using conversion table.

(7) Substract between these two values.

(8) If the remainder is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then the BU is defective and need to be change.

(9) Press RETURN to return back to previous menu.

(10) Press 0 to return to Top Menu and power OFF the DVD Player.

SECTION 5
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Schematic Diagrams.
Note:

- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $^1/_4$ W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ━━ : B+ Line.
- ╍╍ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages and waveforms are dc with respect to ground in service mode.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
  no mark : FM
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO
  ⇨ : CD PLAY
  ⇨ : DVD PLAY
  ▷ : TUNER
  ⇨ : VIDEO
  ▷ : Y
  ▷ : COMPONENT VIDEO
  ▷ : R, G, B
  ➡ : AUX IN
- Abbreviation
  CND : Canadian model

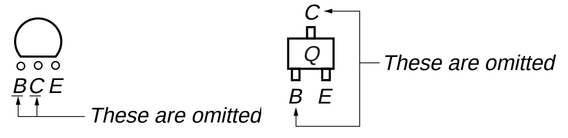
For Printed Wiring Boards.
Note:

- ○— : parts extracted from the component side.
- ○ : Through hole.
- 🟩 : Pattern from the side which enables seeing.

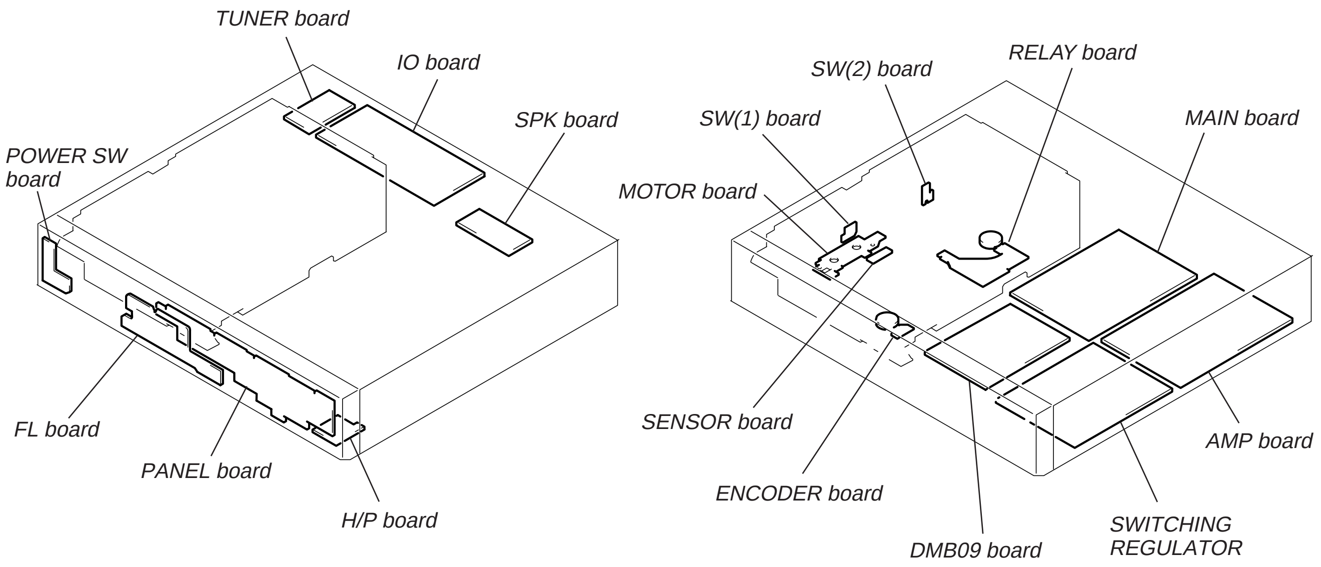
(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (SIDE A) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE B) Parts on the parts face side seen from the parts face are indicated.

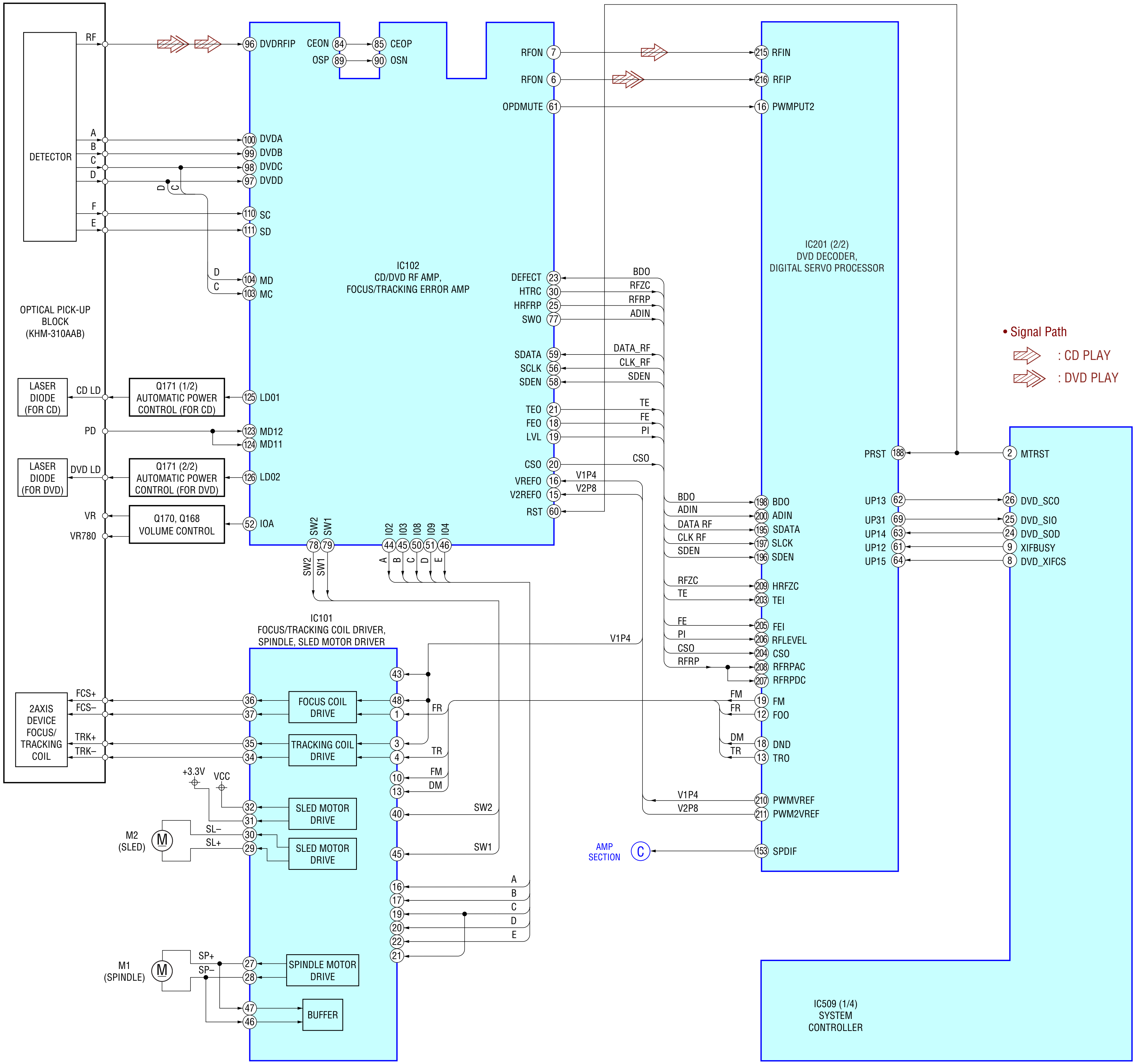
- Indication of transistor.



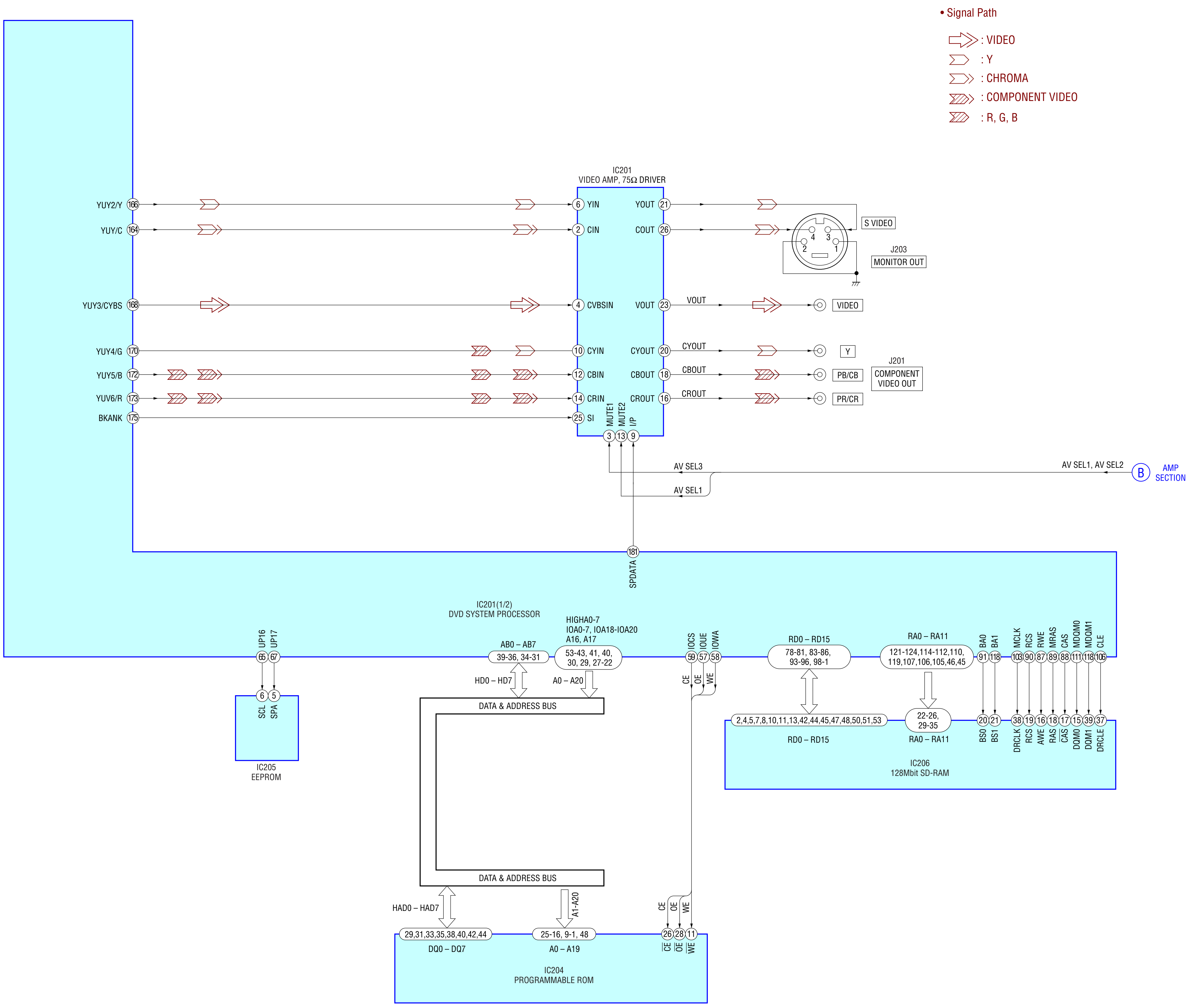
- **Circuit Boards Location**



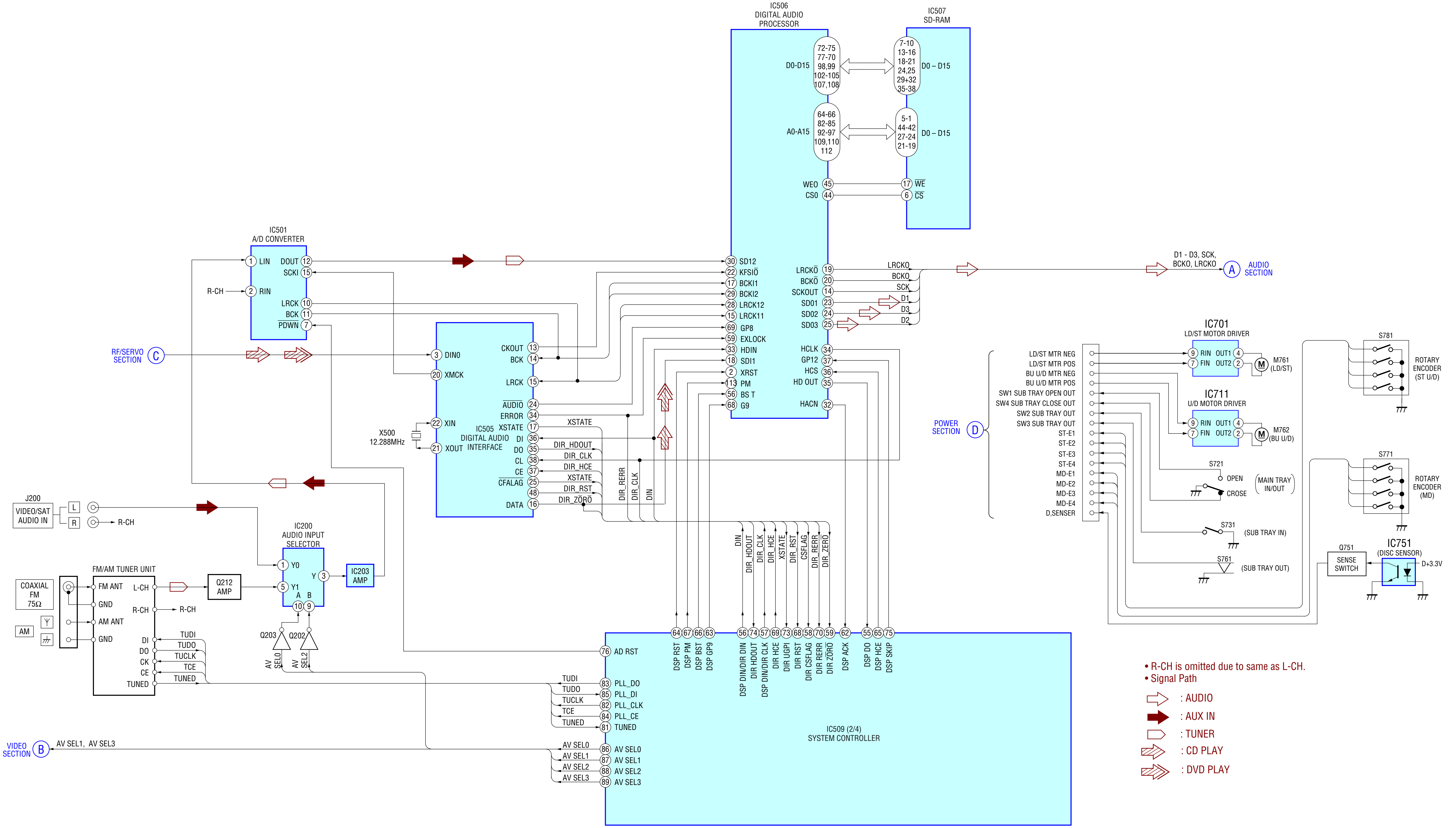
5-1. BLOCK DIAGRAM – RF/SERVO SECTION –


DETECTOR
RF
A
B
C
D
F
E
D
C
OPTICAL PICK-UP
BLOCK
(KHM-310AAB)
LASER
DIODE
(FOR CD)
CD LD
Q171 (1/2)
AUTOMATIC POWER
CONTROL (FOR CD)
PD
LASER
DIODE
(FOR DVD)
DVD LD
Q171 (2/2)
AUTOMATIC POWER
CONTROL (FOR DVD)
VR
VR780
Q170, Q168
VOLUME CONTROL
96 DVDRFIP
CEON 84
OSP 89
85 CEOP
90 OSN
100 DVDA
99 DVDB
98 DVDC
97 DVDD
110 SC
111 SD
104 MD
103 MC
125 LD01
123 MD12
124 MD11
126 LD02
52 IOA
IC102
CD/DVD RF AMP,
FOCUS/TRACKING ERROR AMP
RFON 7
RFON 6
OPDMUTE 61
DEFECT 23
HTRC 30
HRFRP 25
SWO 77
SDATA 59
SCLK 56
SDEN 58
TEO 21
FEO 18
LVL 19
CSO 20
VREFO 16
V2REFO 15
RST 60
SW2 SW1
78 79
I02 I03 I08 I09 I04
44 45 50 51 46
A B C D E
BDO
RFZC
RFRP
ADIN
DATA_RF
CLK_RF
SDEN
TE
FE
PI
CSO
V1P4
V2P8
215 RFIN
216 RFIP
16 PWMPUT2
IC201 (2/2)
DVD DECODER,
DIGITAL SERVO PROCESSOR
198 BDO
200 ADIN
195 SDATA
197 SLCK
196 SDEN
209 HRFZC
203 TEI
205 FEI
206 RFLEVEL
204 CSO
208 RFRPAC
207 RFRPDC
19 FM
12 FOO
18 DND
13 TRO
210 PWMVREF
211 PWM2VREF
153 SPDIF
BDO
ADIN
DATA RF
CLK RF
SDEN
RFZC
TE
FE
PI
CSO
RFRP
FM
FR
DM
TR
V1P4
V2P8
PRST 188
UP13 62
UP31 69
UP14 63
UP12 61
UP15 64
2 MTRST
26 DVD_SCO
25 DVD_SIO
24 DVD_SOD
9 XIFBUSY
8 DVD_XIFCS
IC509 (1/4)
SYSTEM
CONTROLLER
AMP
SECTION
C
• Signal Path
: CD PLAY
: DVD PLAY
IC101
FOCUS/TRACKING COIL DRIVER,
SPINDLE, SLED MOTOR DRIVER
V1P4
2AXIS
DEVICE
FOCUS/
TRACKING
COIL
FCS+
FCS–
TRK+
TRK–
36
37
35
34
FOCUS COIL
DRIVE
TRACKING COIL
DRIVE
43
48
1
3
4
10
13
FR
TR
FM
DM
+3.3V
VCC
32
31
30
29
SLED MOTOR
DRIVE
SLED MOTOR
DRIVE
M2
(SLED)
M
SL–
SL+
40
45
SW2
SW1
16
17
19
20
22
21
A
B
C
D
E
M1
(SPINDLE)
M
SP+
SP–
27
28
SPINDLE MOTOR
DRIVE
47
46
BUFFER

– VIDEO SECTION –


• Signal Path
: VIDEO
: Y
: CHROMA
: COMPONENT VIDEO
: R, G, B
IC201
VIDEO AMP, 75Ω DRIVER
YUY2/Y
166
YUY/C
164
YUY3/CYBS
168
YUY4/G
170
YUY5/B
172
YUV6/R
173
BKANK
175
6 YIN
2 CIN
4 CVBSIN
10 CYIN
12 CBIN
14 CRIN
25 SI
MUTE1
MUTE2
I/P
3
13
9
YOUT 21
COUT 26
VOUT 23
CYOUT 20
CBOUT 18
CROUT 16
VOUT
CYOUT
CBOUT
CROUT
4
3
2
1
S VIDEO
J203
MONITOR OUT
VIDEO
Y
PB/CB
PR/CR
J201
COMPONENT
VIDEO OUT
AV SEL3
AV SEL1
AV SEL1, AV SEL2
B
AMP
SECTION
181
SPDATA
IC201(1/2)
DVD SYSTEM PROCESSOR
UP16
UP17
65
67
6
5
SCL
SPA
IC205
EEPROM
AB0 – AB7
39-36, 34-31
HIGHA0-7
IOA0-7, IOA18-IOA20
A16, A17
53-43, 41, 40,
30, 29, 27-22
HD0 – HD7
A0 – A20
DATA & ADDRESS BUS
DATA & ADDRESS BUS
HAD0 – HAD7
A1-A20
29,31,33,35,38,40,42,44
25-16, 9-1, 48
DQ0 – DQ7
A0 – A19
IC204
PROGRAMMABLE ROM
IOCS
IOUE
IOWA
59
57
58
CE
OE
WE
CE
OE
WE
26
28
11
CE
OE
WE
RD0 – RD15
78-81, 83-86,
93-96, 98-1
RA0 – RA11
121-124,114-112,110,
119,107,106,105,46,45
BA0
BA1
MCLK
RCS
RWE
MRAS
CAS
MDOM0
MDOM1
CLE
91
118
103
90
87
89
88
111
118
106
2,4,5,7,8,10,11,13,42,44,45,47,48,50,51,53
22-26,
29-35
RD0 – RD15
RA0 – RA11
20
21
38
19
16
18
17
15
39
37
BS0
BS1
DRCLK
RCS
AWE
RAS
CAS
DQM0
DOM1
DRCLE
IC206
128Mbit SD-RAM

– AMP SECTION –


IC506
DIGITAL AUDIO PROCESSOR
IC507
SD-RAM
D0-D15
72-75 77-70 98,99 102-105 107,108
7-10 13-16 18-21 24,25 29+32 35-38
D0 – D15
A0-A15
64-66 82-85 92-97 109,110 112
5-1 44-42 27-24 21-19
WEO 45
CS0 44
17 WE
6 CS
IC501
A/D CONVERTER
1 LIN
DOUT 12
SCKI 15
R-CH
2 RIN
LRCK 10
BCK 11
PDWN 7
30 SD12
22 KFSIO
17 BCKI1
29 BCKI2
28 LRCK12
15 LRCK11
69 GP8
59 EXLOCK
33 HDIN
18 SDI1
2 XRST
113 PM
56 BS T
68 G9
LRCKO 19
BCKO 20
SCKOUT 14
SD01 23
SD02 24
SD03 25
HCLK 34
GP12 37
HCS 36
HD OUT 35
HACN 32
LRCKO
BCKO
SCK
D1
D3
D2
D1 - D3, SCK, BCKO, LRCKO
A AUDIO SECTION
RF/SERVO SECTION C
3 DINO
20 XMCK
CKOUT 13
BCK 14
LRCK 15
AUDIO 24
ERROR 34
22 XIN
XSTATE 17
X500 12.288MHz
IC505
DIGITAL AUDIO INTERFACE
21 XOUT
DI 36
DO 35
CL 38
CE 37
CFALAG 25
48
DATA 16
XSTATE
DIR_HDOUT
DIR_CLK
DIR_HCE
XSTATE
DIR_RST
DIR_ZORO
DIR_RERR
DIR_CLK
DIN
DIN
DIR_HDOUT
DIR_CLK
DIR_HCE
XSTATE
DIR_RST
CSFLAG
DIR_RERR
DIR_ZERO
J200
VIDEO/SAT AUDIO IN
L
R
R-CH
IC200
AUDIO INPUT SELECTOR
1 Y0
Y 3
5 Y1
A B
10 9
IC203 AMP
Q212 AMP
FM/AM TUNER UNIT
COAXIAL FM 75Ω
AM
FM ANT
GND
AM ANT
GND
L-CH
R-CH
R-CH
DI
DO
CK
CE
TUNED
TUDI
TUDO
TUCLK
TCE
TUNED
Q203
Q202
AV SEL0
AV SEL2
76 AD RST
TUDI 83 PLL_DO
TUDO 85 PLL_DI
TUCLK 82 PLL_CLK
TCE 84 PLL_CE
TUNED 81 TUNED
VIDEO SECTION B
AV SEL1, AV SEL3
AV SEL0 86 AV SEL0
AV SEL1 87 AV SEL1
AV SEL2 88 AV SEL2
AV SEL3 89 AV SEL3
64 67 66 63
DSP RST
DSP PM
DSP BST
DSP GP9
56 74 57 69 73 68 58 70 59
DSP DIN/DIR DIN
DIR HDOUT
DSP DIN/DIR CLK
DIR HCE
DIR UGPI
DIR RST
DIR CSFLAG
DIR RERR
DIR ZORO
62
DSP ACK
55 65 75
DSP DO
DSP HCE
DSP SKIP
IC509 (2/4)
SYSTEM CONTROLLER
IC701
LD/ST MOTOR DRIVER
9 RIN OUT1 4
7 FIN OUT2 2
M M761 (LD/ST)
IC711
U/D MOTOR DRIVER
9 RIN OUT1 4
7 FIN OUT2 2
M M762 (BU U/D)
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 SUB TRAY OPEN OUT
SW4 SUB TRAY CLOSE OUT
SW2 SUB TRAY OUT
SW3 SUB TRAY OUT
ST-E1
ST-E2
ST-E3
ST-E4
MD-E1
MD-E2
MD-E3
MD-E4
D,SENSER
POWER SECTION D
S781
ROTARY ENCODER (ST U/D)
S771
ROTARY ENCODER (MD)
S721
OPEN
CROSE
(MAIN TRAY IN/OUT)
S731
(SUB TRAY IN)
S761
(SUB TRAY OUT)
Q751
SENSE SWITCH
IC751
(DISC SENSOR)
D+3.3V

- R-CH is omitted due to same as L-CH.
- Signal Path

⇨ : AUDIO

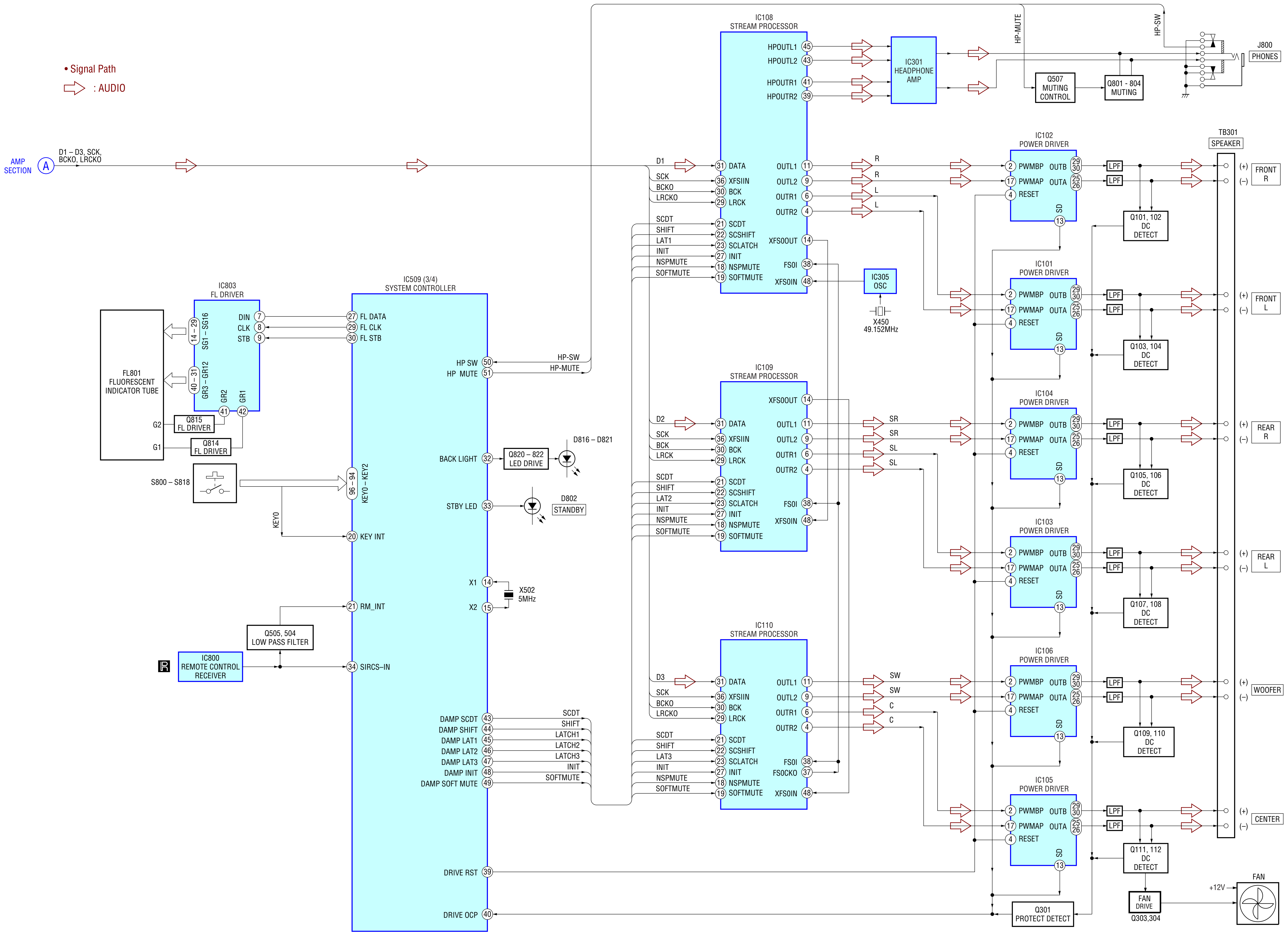
➡ : AUX IN

▭ : TUNER

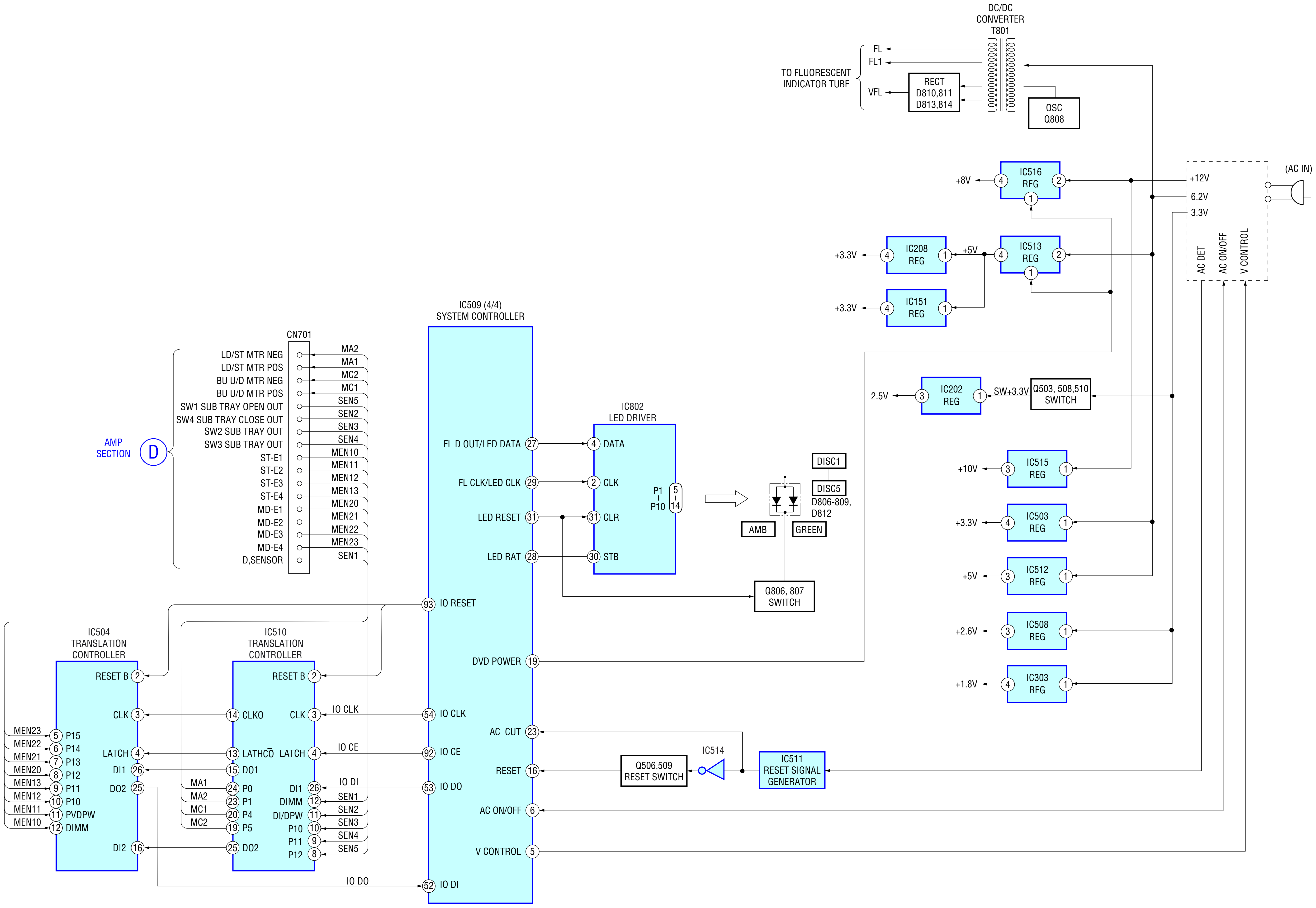
⇨ : CD PLAY

⇨ : DVD PLAY

– AUDIO SECTION –

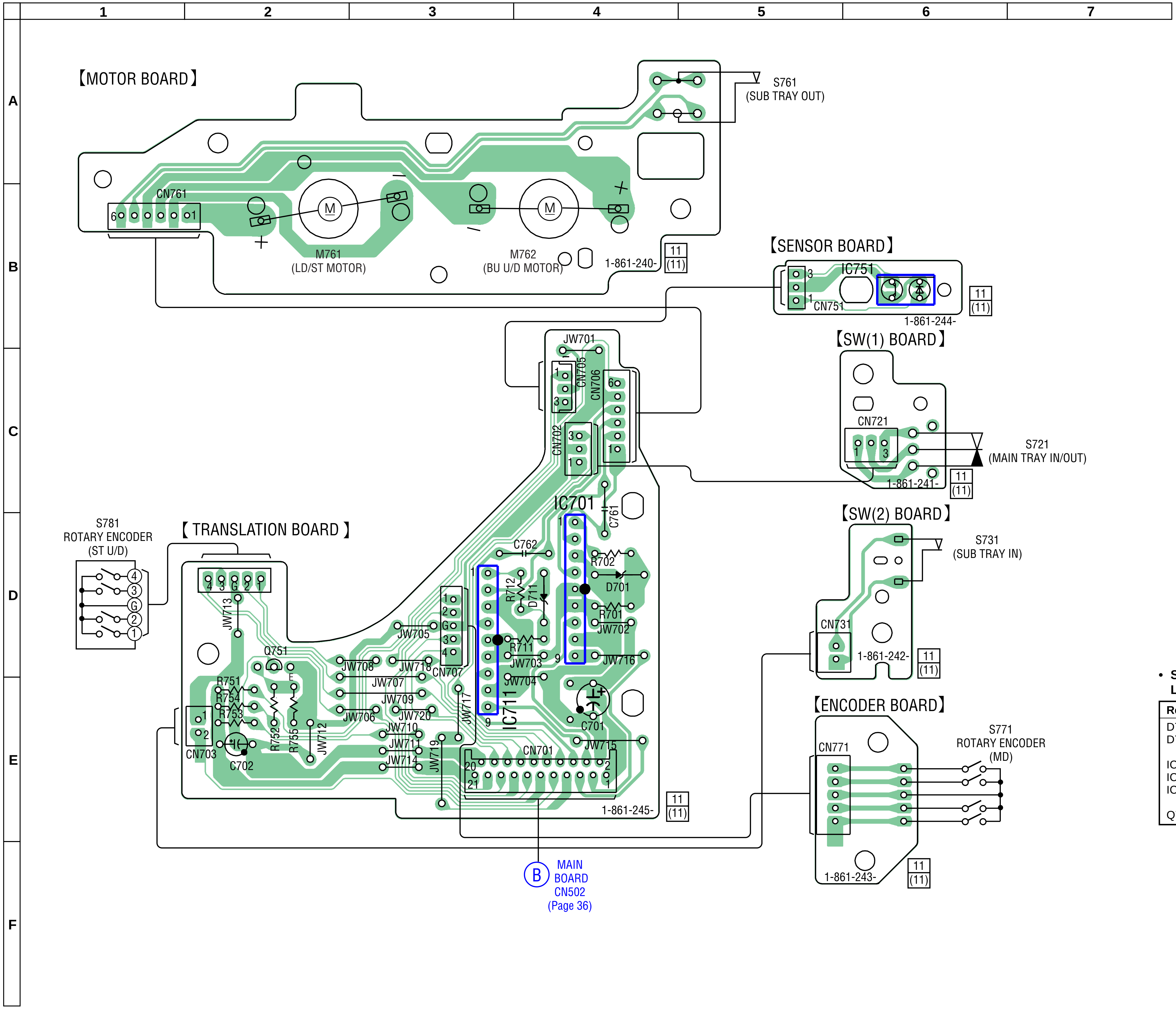

• Signal Path
: AUDIO
AMP SECTION
A
D1 – D3, SCK, BCKO, LRCKO
IC108
STREAM PROCESSOR
HPOUTL1 45
HPOUTL2 43
HPOUTR1 41
HPOUTR2 39
31 DATA
36 XFSIIN
30 BCK
29 LRCK
21 SCDT
22 SCSHIFT
23 SCLATCH
27 INIT
18 NSPMUTE
19 SOFTMUTE
OUTL1 11
OUTL2 9
OUTR1 6
OUTR2 4
XFSOOUT 14
FSOI 38
XFSOIN 48
IC301
HEADPHONE AMP
HP-MUTE
HP-SW
Q507
MUTING CONTROL
Q801 - 804
MUTING
J800
PHONES
IC305
OSC
X450
49.152MHz
D1
SCK
BCKO
LRCKO
SCDT
SHIFT
LAT1
INIT
NSPMUTE
SOFTMUTE
R
R
L
L
IC102
POWER DRIVER
IC101
POWER DRIVER
IC104
POWER DRIVER
IC103
POWER DRIVER
IC106
POWER DRIVER
IC105
POWER DRIVER
2 PWMBP
17 PWMAP
4 RESET
OUTB 29 30
OUTA 25 26
SD 13
LPF
Q101, 102
DC DETECT
Q103, 104
DC DETECT
Q105, 106
DC DETECT
Q107, 108
DC DETECT
Q109, 110
DC DETECT
Q111, 112
DC DETECT
TB301
SPEAKER
(+)
(–)
FRONT R
FRONT L
REAR R
REAR L
WOOFER
CENTER
IC109
STREAM PROCESSOR
D2
SCK
BCK
LRCK
LAT2
SR
SR
SL
SL
IC110
STREAM PROCESSOR
D3
LAT3
FSOCKO 37
SW
SW
C
C
IC803
FL DRIVER
DIN 7
CLK 8
STB 9
14 – 29
SG1 – SG16
40 – 31
GR3 – GR12
GR2
GR1
41
42
FL801
FLUORESCENT INDICATOR TUBE
G2
G1
Q815
FL DRIVER
Q814
FL DRIVER
S800 – S818
KEY0
IC509 (3/4)
SYSTEM CONTROLLER
27 FL DATA
29 FL CLK
30 FL STB
HP SW 50
HP MUTE 51
BACK LIGHT 32
STBY LED 33
96 – 94
KEY0 – KEY2
20 KEY INT
X1 14
X2 15
21 RM_INT
34 SIRCS–IN
DAMP SCDT 43
DAMP SHIFT 44
DAMP LAT1 45
DAMP LAT2 46
DAMP LAT3 47
DAMP INIT 48
DAMP SOFT MUTE 49
DRIVE RST 39
DRIVE OCP 40
SCDT
SHIFT
LATCH1
LATCH2
LATCH3
INIT
SOFTMUTE
Q820 – 822
LED DRIVE
D816 – D821
D802
STANDBY
X502
5MHz
Q505, 504
LOW PASS FILTER
IC800
REMOTE CONTROL RECEIVER
Q301
PROTECT DETECT
FAN
+12V
FAN DRIVE
Q303,304

– POWER SECTION –


DC/DC CONVERTER T801
TO FLUORESCENT INDICATOR TUBE
FL
FL1
VFL
RECT D810,811 D813,814
OSC Q808
(AC IN)
+12V
6.2V
3.3V
AC DET
AC ON/OFF
V CONTROL
+8V
IC516 REG
+3.3V
IC208 REG
+5V
IC513 REG
+3.3V
IC151 REG
IC509 (4/4) SYSTEM CONTROLLER
CN701
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 SUB TRAY OPEN OUT
SW4 SUB TRAY CLOSE OUT
SW2 SUB TRAY OUT
SW3 SUB TRAY OUT
ST-E1
ST-E2
ST-E3
ST-E4
MD-E1
MD-E2
MD-E3
MD-E4
D,SENSOR
MA2
MA1
MC2
MC1
SEN5
SEN2
SEN3
SEN4
MEN10
MEN11
MEN12
MEN13
MEN20
MEN21
MEN22
MEN23
SEN1
AMP SECTION
D
2.5V
IC202 REG
SW+3.3V
Q503, 508,510 SWITCH
IC802 LED DRIVER
FL D OUT/LED DATA 27
FL CLK/LED CLK 29
LED RESET 31
LED RAT 28
4 DATA
2 CLK
31 CLR
30 STB
P1 – P10
5 – 14
DISC1
DISC5
D806-809, D812
AMB
GREEN
Q806, 807 SWITCH
+10V
IC515 REG
+3.3V
IC503 REG
+5V
IC512 REG
+2.6V
IC508 REG
+1.8V
IC303 REG
93 IO RESET
DVD POWER 19
54 IO CLK
AC_CUT 23
92 IO CE
RESET 16
53 IO DO
AC ON/OFF 6
V CONTROL 5
52 IO DI
IC504 TRANSLATION CONTROLLER
RESET B 2
CLK 3
LATCH 4
DI1 26
DO2 25
DI2 16
5 P15
6 P14
7 P13
8 P12
9 P11
10 P10
11 PVDPW
12 DIMM
IC510 TRANSLATION CONTROLLER
RESET B 2
14 CLKO
CLK 3
13 LATCHO
LATCH 4
15 DO1
24 P0
DI1 26
23 P1
DIMM 12
20 P4
DI/DPW 11
19 P5
P10 10
P11 9
25 DO2
P12 8
MA1
MA2
MC1
MC2
IO CLK
IO CE
IO DI
SEN1
SEN2
SEN3
SEN4
SEN5
IO DO
Q506,509 RESET SWITCH
IC514
IC511 RESET SIGNAL GENERATOR

5-2. PRINTED WIRING BOARD – DVD MECHANISM SECTION –

• See page 21 for Circuit Boards Location.

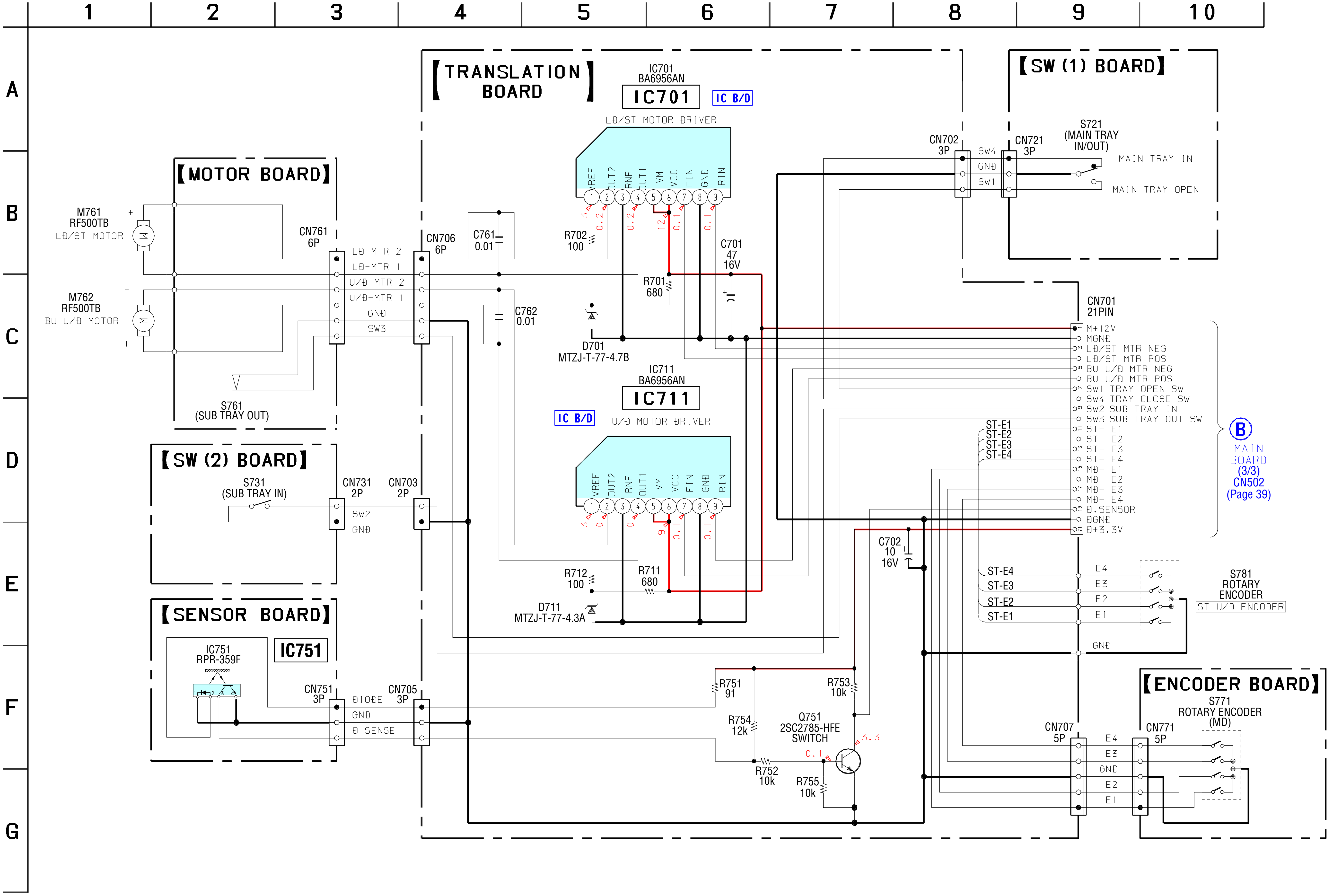

1
2
3
4
5
6
7
A
B
C
D
E
F
【MOTOR BOARD】
CN761
6
1
M
M
M761
(LD/ST MOTOR)
M762
(BU U/D MOTOR)
1-861-240-
11
(11)
S761
(SUB TRAY OUT)
【SENSOR BOARD】
IC751
3
1
CN751
1-861-244-
11
(11)
【SW(1) BOARD】
CN721
1
3
S721
(MAIN TRAY IN/OUT)
1-861-241-
11
(11)
【SW(2) BOARD】
S731
(SUB TRAY IN)
CN731
1-861-242-
11
(11)
【ENCODER BOARD】
CN771
S771
ROTARY ENCODER
(MD)
1-861-243-
11
(11)
S781
ROTARY ENCODER
(ST U/D)
4
3
G
2
1
【 TRANSLATION BOARD 】
JW701
CN705
1
3
CN706
6
1
CN702
3
1
IC701
1
9
C761
C762
R702
D701
R701
JW702
R712
D711
R711
JW703
JW704
JW716
C701
JW715
IC711
1
9
CN701
20
21
2
1
CN707
1
2
G
3
4
JW705
JW713
Q751
JW708
JW718
JW707
JW709
JW706
JW720
JW710
JW711
JW714
JW717
JW719
JW712
R751
R754
R753
R752
R755
CN703
1
2
C702
1-861-245-
11
(11)
B
MAIN
BOARD
CN502
(Page 36)

• **Semiconductor Location**

Ref. No.	Location
D701	D-4
D711	D-4
IC701	C-4
IC711	E-4
IC751	B-6
Q751	D-2

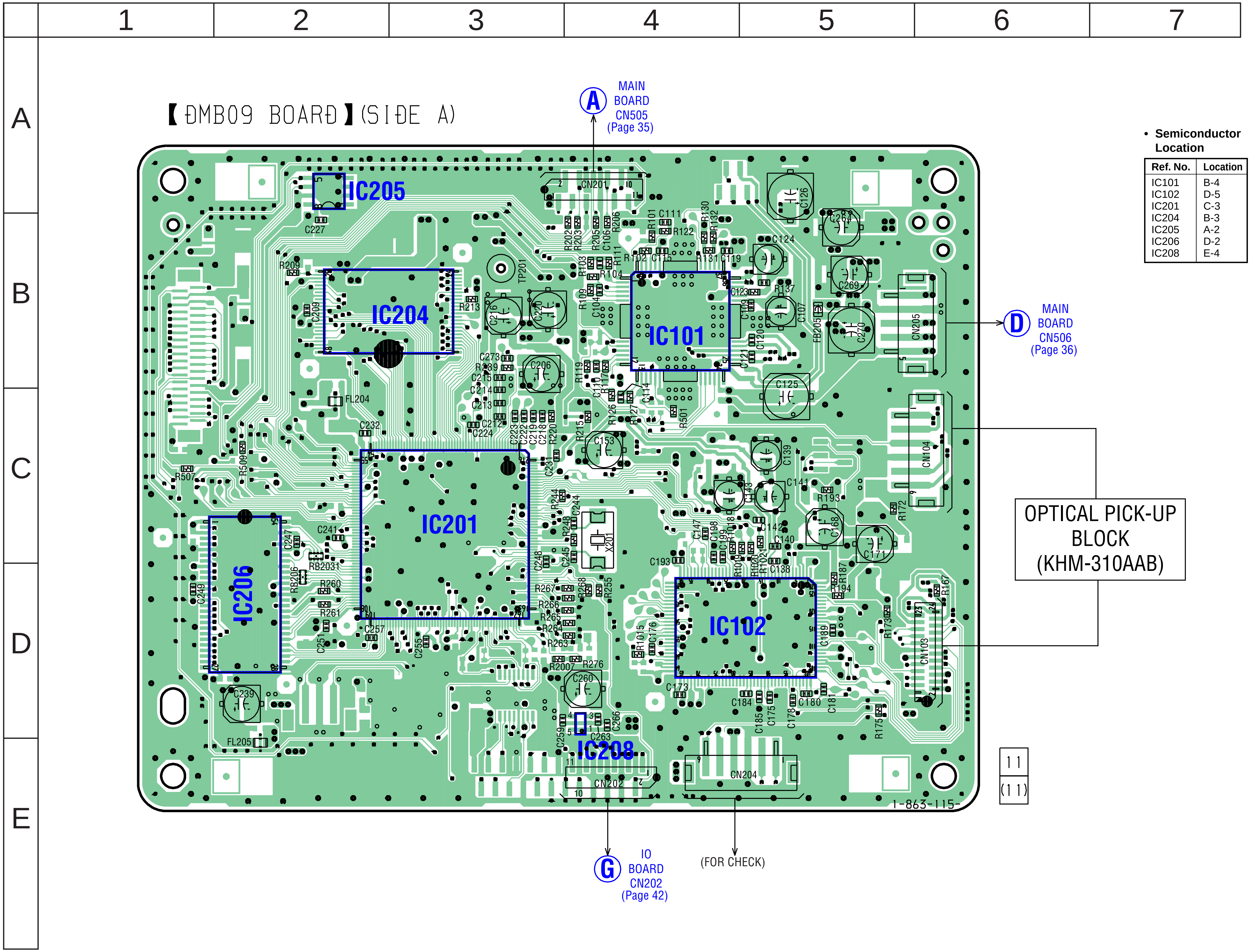
5-3. SCHEMATIC DIAGRAM – DVD MECHANISM SECTION –

• See page 52 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10
A B C D E F G
【TRANSLATION BOARD】
IC701 BA6956AN
IC701
IC B/D
LD/ST MOTOR DRIVER
VREF OUT2 RNF OUT1 VM VCC FIN GND RIN
【SW (1) BOARD】
CN702 3P
SW4 GND SW1
CN721 3P
S721 (MAIN TRAY IN/OUT)
MAIN TRAY IN
MAIN TRAY OPEN
【MOTOR BOARD】
M761 RF500TB LD/ST MOTOR
M762 RF500TB BU U/D MOTOR
CN761 6P
LD-MTR 2
LD-MTR 1
U/D-MTR 2
U/D-MTR 1
GND
SW3
CN706 6P
C761 0.01
C762 0.01
R702 100
R701 680
C701 47 16V
D701 MTZJ-T-77-4.7B
S761 (SUB TRAY OUT)
CN701 21PIN
M+12V
MGND
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 TRAY OPEN SW
SW4 TRAY CLOSE SW
SW2 SUB TRAY IN
SW3 SUB TRAY OUT SW
ST- E1
ST- E2
ST- E3
ST- E4
MD- E1
MD- E2
MD- E3
MD- E4
D.SENSOR
DGND
D+3.3V
B MAIN BOARD (3/3) CN502 (Page 39)
IC711 BA6956AN
IC711
IC B/D
U/D MOTOR DRIVER
【SW (2) BOARD】
S731 (SUB TRAY IN)
CN731 2P
CN703 2P
SW2
GND
ST-E1 ST-E2 ST-E3 ST-E4
R712 100
R711 680
D711 MTZJ-T-77-4.3A
C702 10 16V
ST-E4 ST-E3 ST-E2 ST-E1
E4 E3 E2 E1
GND
S781 ROTARY ENCODER
ST U/D ENCODER
【SENSOR BOARD】
IC751 RPR-359F
IC751
CN751 3P
CN705 3P
DIODE
GND
D SENSE
R751 91
R753 10k
R754 12k
Q751 2SC2785-HFE SWITCH
R752 10k
R755 10k
3.3
0.1
【ENCODER BOARD】
S771 ROTARY ENCODER (MD)
CN707 5P
CN771 5P
E4 E3 GND E2 E1

5-4. PRINTED WIRING BOARD – DMB09 SECTION (SIDE A) –

- See page 21 for Circuit Boards Location.

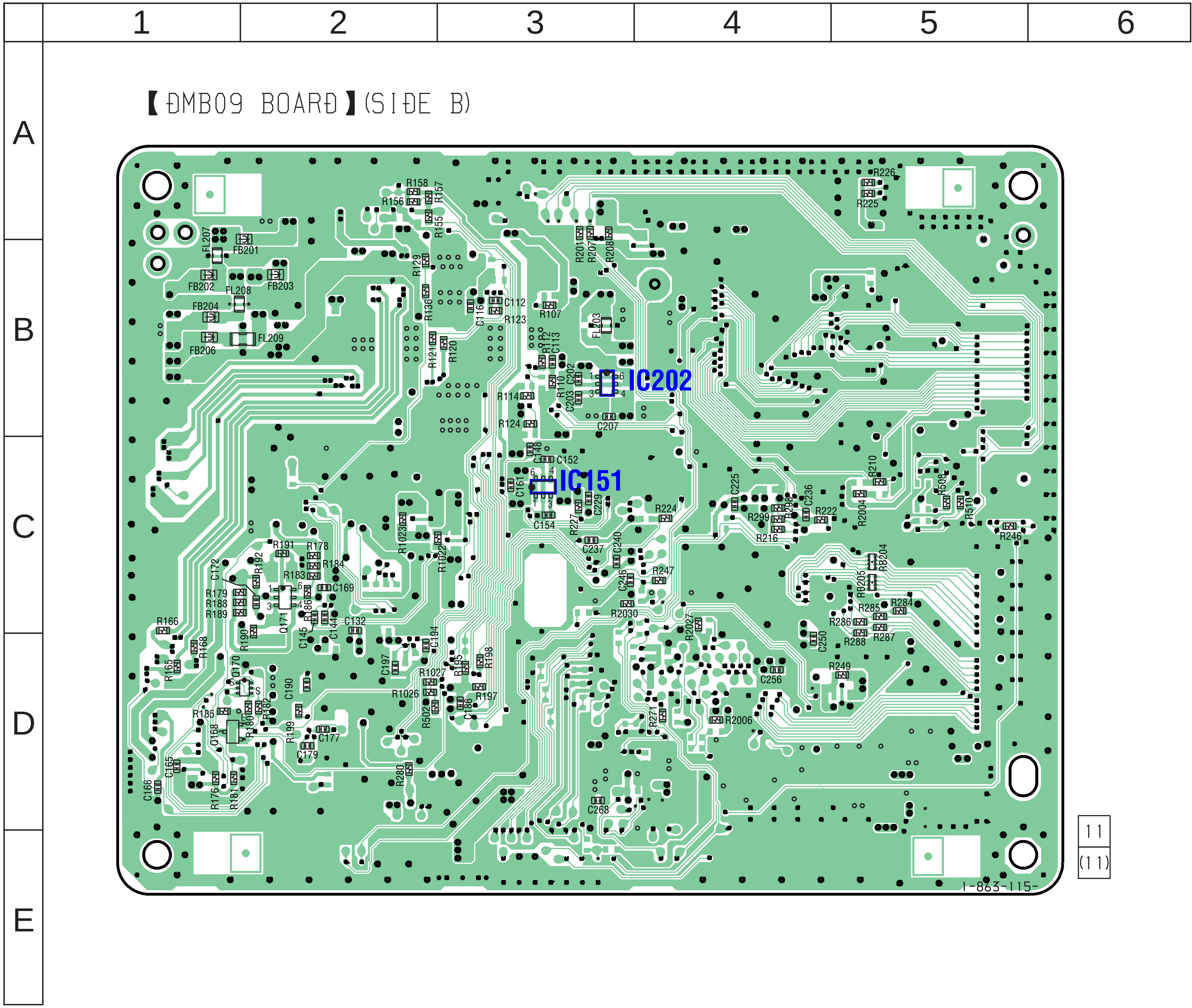

1
2
3
4
5
6
7
A
B
C
D
E
【DMB09 BOARD】(SIDE A)
A
MAIN BOARD CN505 (Page 35)
D
MAIN BOARD CN506 (Page 36)
G
IO BOARD CN202 (Page 42)
(FOR CHECK)
OPTICAL PICK-UP BLOCK (KHM-310AAB)
IC205
IC204
IC101
IC201
IC206
IC102
IC208
CN201
CN205
CN104
CN103
CN202
CN204
X201
FL204
FL205
TP201
1-863-115-
11
(11)

- **Semiconductor Location**

Ref. No.	Location
IC101	B-4
IC102	D-5
IC201	C-3
IC204	B-3
IC205	A-2
IC206	D-2
IC208	E-4

5-5. PRINTED WIRING BOARD – DMB09 SECTION (SIDE B) –

- See page 21 for Circuit Boards Location.

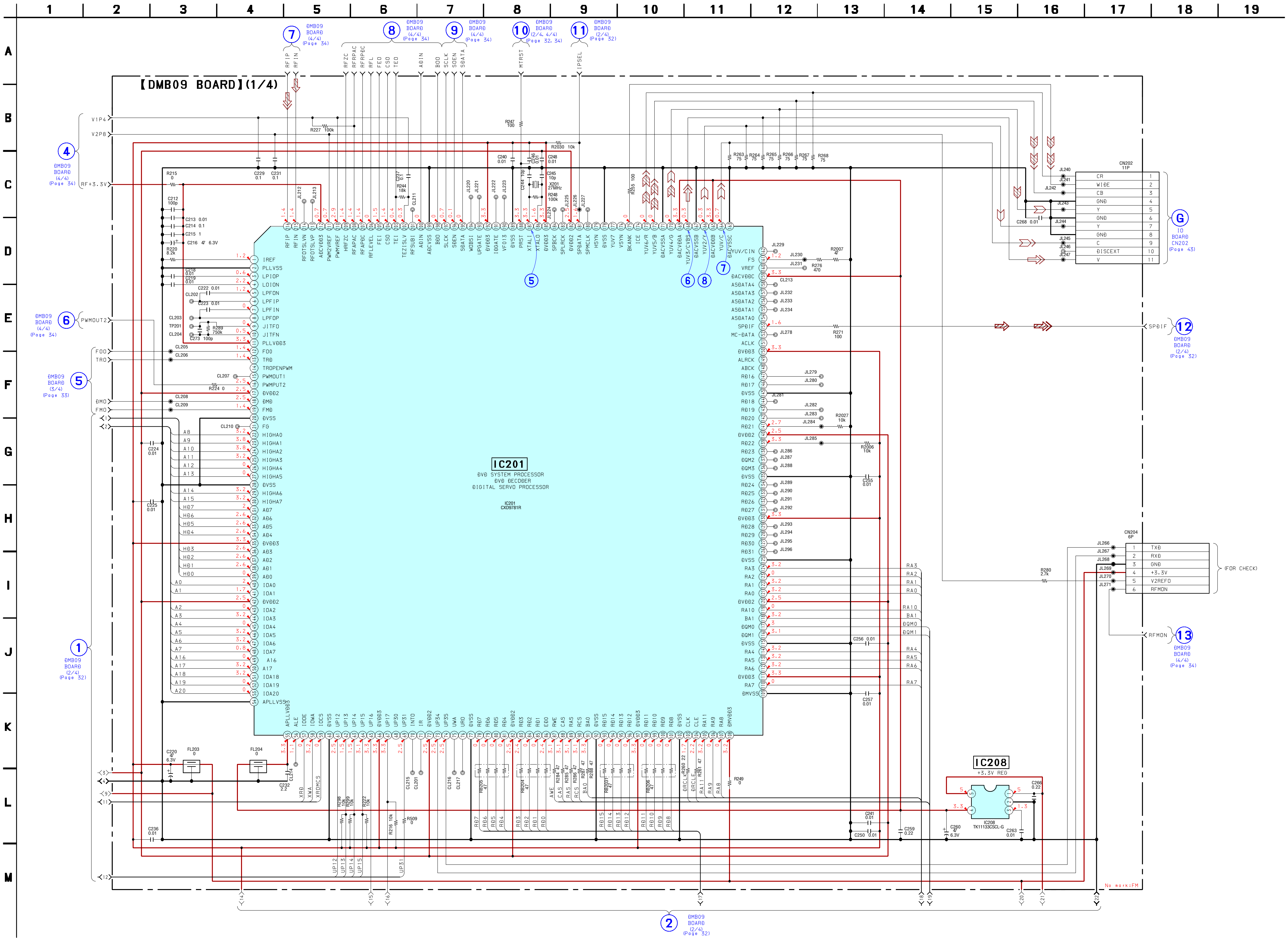

1
2
3
4
5
6
A
B
C
D
E
【DMB09 BOARD】(SIDE B)
IC202
IC151
R158
R156
R157
R155
R129
R136
R121
R120
C116
C112
R123
R107
R112
C113
R110
C202
C203
FL203
R201
R207
R208
R114
R124
C207
C148
C152
C161
C154
R227
C229
C237
C240
C246
R224
R247
R2030
FL207
FB201
FB202
FL208
FB203
FB204
FB206
FL209
R191
R178
R192
R183
R184
C172
R179
R188
R189
Q171
C169
R186
C144
C132
C145
R166
R165
R168
R190
Q170
C190
R185
R180
R182
Q168
R199
C177
C179
C165
C166
R176
R181
R1023
R1022
C194
C197
R1027
R1026
R502
R195
R198
C186
R197
R280
C268
R271
R2027
R2006
C256
C225
R299
R298
C236
R216
R222
R2004
R210
R508
R510
R246
R8204
R8205
R284
R285
R286
R287
R288
C250
R249
R226
R225
1-863-115-
11
(11)

- **Semiconductor Location**

Ref. No.	Location
IC151	C-3
IC202	B-4
Q168	D-1
Q170	D-1
Q171	C-2

5-6. SCHEMATIC DIAGRAM – DMB09 SECTION (1/4) –

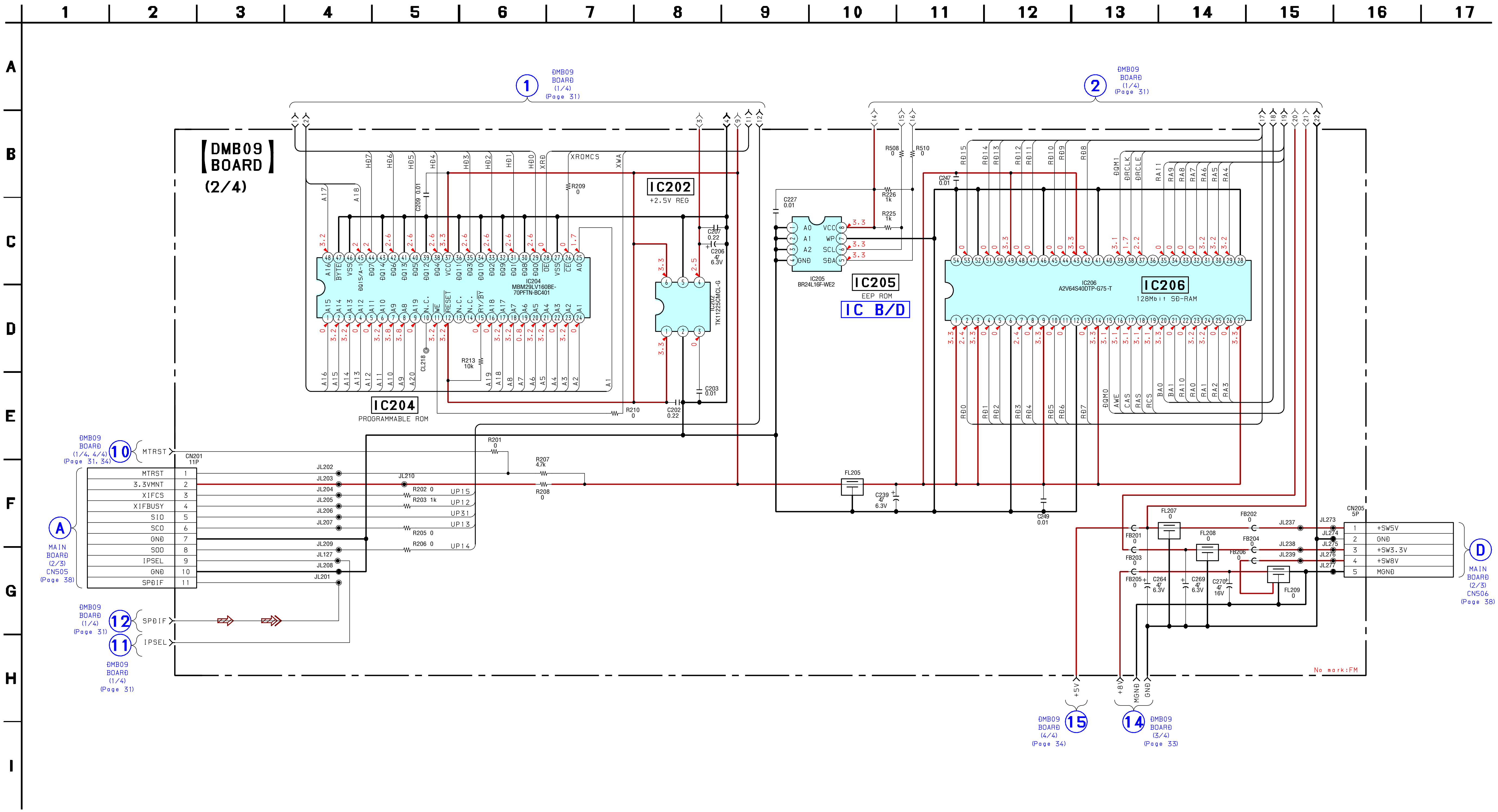
- See page 59 for IC Pin Function Description.
- See page 51 for Waveforms.



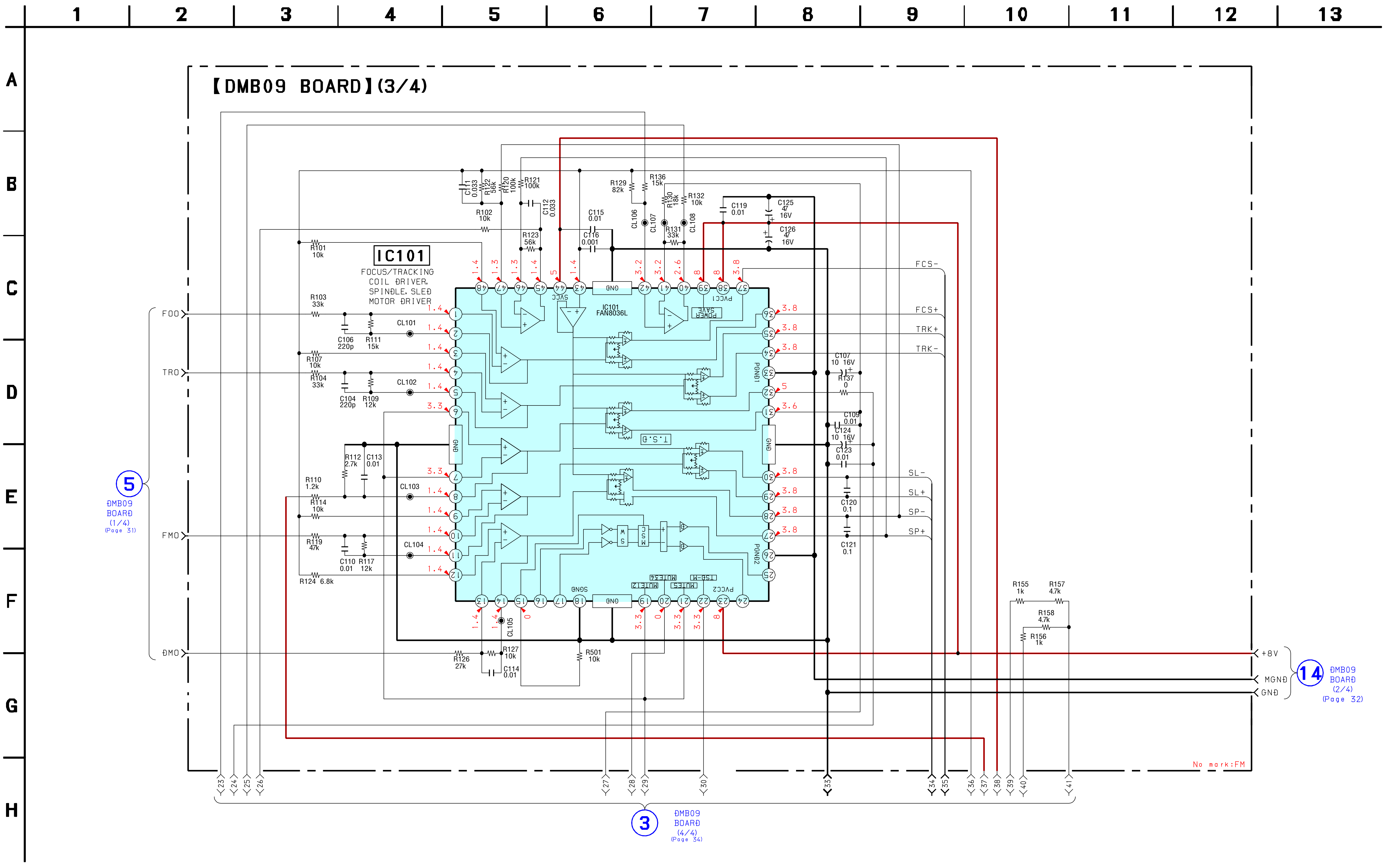
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
A B C D E F G H I J K L M
【DMB09 BOARD】(1/4)
IC201
DVD SYSTEM PROCESSOR
DVD DECODER
DIGITAL SERVO PROCESSOR
IC201
CXD9781R
IC208
+3.3V REG
IC208
TK11133CSCL-G
CN202
11P
CR
WIDE
CB
GND
Y
GND
Y
GND
C
DISCEXT
V
G
IO BOARD
CN202
(Page 43)
CN204
6P
TXD
RXD
GND
+3.3V
V2REFO
RFMON
(FOR CHECK)
SPDIF
12
DMB09 BOARD
(2/4)
(Page 32)
RFMON
13
DMB09 BOARD
(4/4)
(Page 34)
7
DMB09 BOARD
(4/4)
(Page 34)
8
DMB09 BOARD
(4/4)
(Page 34)
9
DMB09 BOARD
(4/4)
(Page 34)
10
DMB09 BOARD
(2/4, 4/4)
(Page 32, 34)
11
DMB09 BOARD
(2/4)
(Page 32)
4
DMB09 BOARD
(4/4)
(Page 34)
6
DMB09 BOARD
(4/4)
(Page 34)
5
DMB09 BOARD
(3/4)
(Page 33)
1
DMB09 BOARD
(2/4)
(Page 32)
2
DMB09 BOARD
(2/4)
(Page 32)
V1P4
V2P8
RF+3.3V
PWMOUT2
FOO
TRO
DMD
FMD
No mark:FM

5-7. SCHEMATIC DIAGRAM – DMB09 SECTION (2/4) –

• See page 53 for IC Block Diagrams.


DMB09 BOARD (2/4)
IC202 +2.5V REG
IC204 PROGRAMMABLE ROM
IC204 MBM29LV160BE-70PFTN-BC401
IC205 EEP ROM
IC205 BR24L16F-WE2
IC B/D
IC206 128Mbit SD-RAM
IC206 A2V64S40DTP-G75-T
IC202 TK11225CMCL-G
DMB09 BOARD (1/4) (Page 31)
DMB09 BOARD (1/4, 4/4) (Page 31, 34)
DMB09 BOARD (3/4) (Page 33)
DMB09 BOARD (4/4) (Page 34)
MAIN BOARD (2/3) CN505 (Page 38)
MAIN BOARD (2/3) CN506 (Page 38)
CN201 11P
MTRST
3.3VMNT
XIFCS
XIFBUSY
SIO
SCO
GND
SOO
IPSEL
SPDIF
CN205 5P
+SW5V
GND
+SW3.3V
+SW8V
MGND
+5V
+8V
MGND
GND
No mark:FM

5-8. SCHEMATIC DIAGRAM – DMB09 SECTION (3/4) –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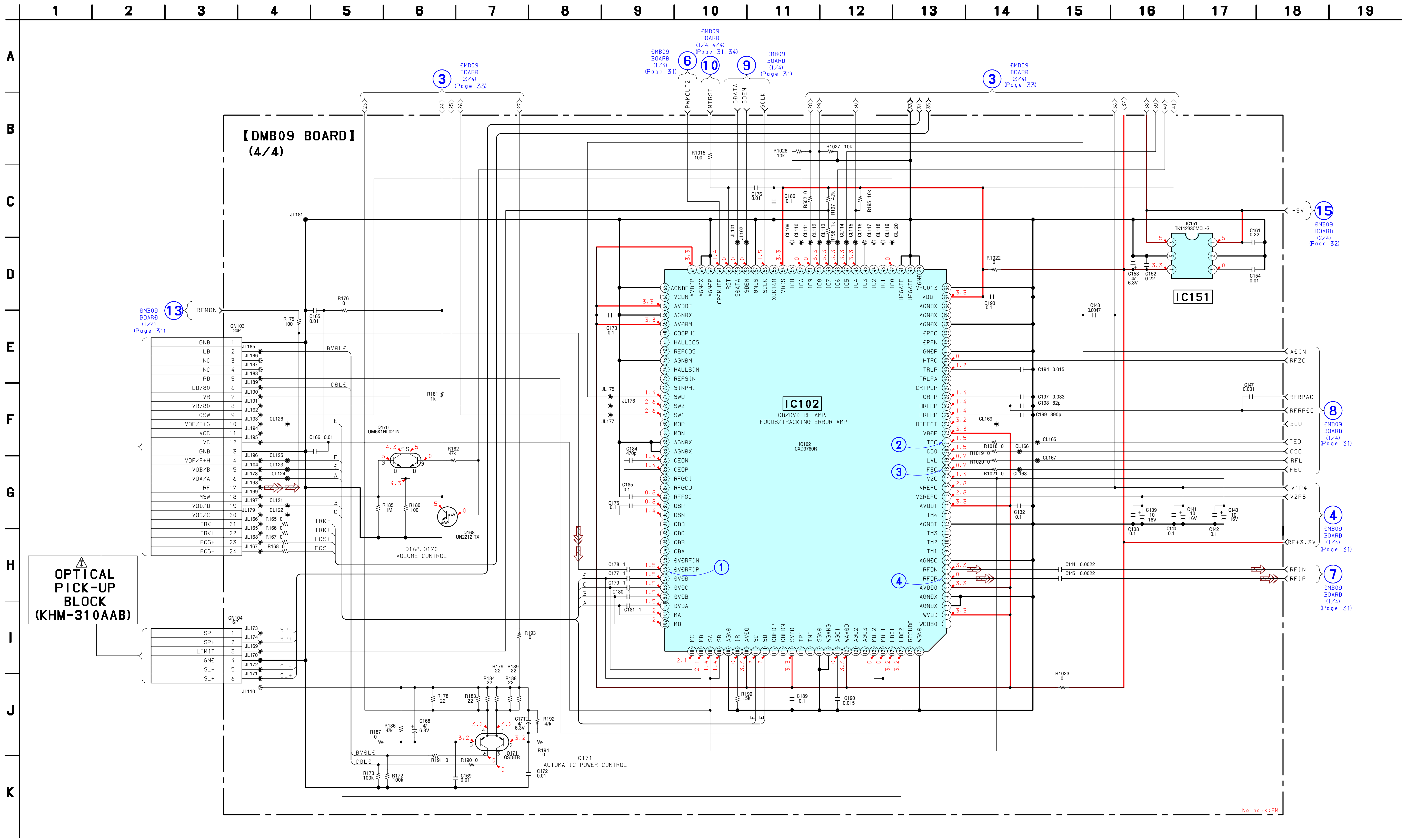
12
13
A
B
C
D
E
F
G
H
【DMB09 BOARD】(3/4)
IC101
FOCUS/TRACKING
COIL DRIVER,
SPINDLE, SLED
MOTOR DRIVER
IC101
FAN8036L
POWER SAVE
PVCC1
SVCC
GND
PGND1
PGND2
PVCC2
SGND
T.S.D
TSD-M
MUTE12
MUTE34
MUTE5
C111 0.033
R122 56k
R120 100k
R121 100k
C112 0.033
R102 10k
R123 56k
C115 0.01
C116 0.001
R129 82k
R136 15k
R130 18k
R131 33k
R132 10k
CL106
CL107
CL108
C119 0.01
C125 47 16V
C126 47 16V
R101 10k
R103 33k
C106 220p
R111 15k
CL101
R107 10k
R104 33k
C104 220p
R109 12k
CL102
R112 2.7k
C113 0.01
R110 1.2k
CL103
R114 10k
R119 47k
C110 0.01
R117 12k
CL104
R124 6.8k
CL105
R126 27k
R127 10k
C114 0.01
R501 10k
C107 10 16V
R137 0
C109 0.01
C124 10 16V
C123 0.01
C120 0.1
C121 0.1
R155 1k
R157 4.7k
R158 4.7k
R156 1k
FOO
TRO
FMO
DMO
FCS-
FCS+
TRK+
TRK-
SL-
SL+
SP-
SP+
+8V
MGND
GND
5
DMB09 BOARD (1/4) (Page 31)
14
DMB09 BOARD (2/4) (Page 32)
3
DMB09 BOARD (4/4) (Page 34)
No mark:FM
1.4
1.3
1.3
1.4
5
1.4
3.2
3.2
2.6
8
8
3.8
3.8
3.8
3.8
5
3.6
3.8
3.8
3.8
3.8
1.4
1.4
1.4
1.4
1.4
3.3
3.3
1.4
1.4
1.4
1.4
1.4
1.4
1.4
0
3.3
0
3.3
3.3
8
23
24
25
26
27
28
29
30
33
34
35
36
37
38
39
40
41

5-9. SCHEMATIC DIAGRAM – DMB09 SECTION (4/4) –

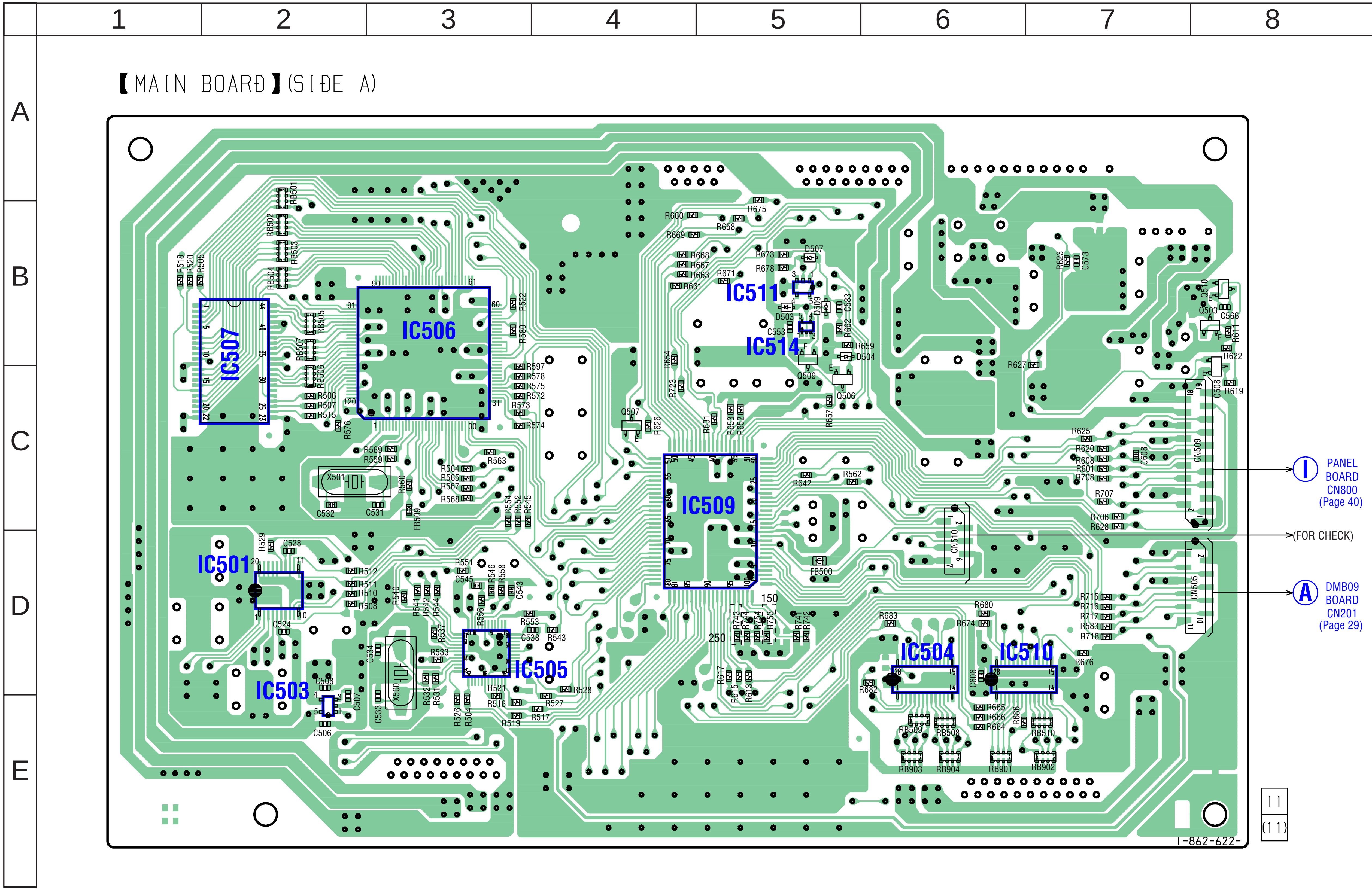
- See page 56 for IC Pin Function Description.
- See page 51 for Waveforms.


【DMB09 BOARD】
(4/4)
IC102
CD/DVD RF AMP,
FOCUS/TRACKING ERROR AMP
IC102
CXD9780R
IC151
TK11233CMCL-G
OPTICAL
PICK-UP
BLOCK
(KHM-310AAB)
CN103
24P
CN104
6P
Q168, Q170
VOLUME CONTROL
Q171
AUTOMATIC POWER CONTROL
DMB09 BOARD (1/4) (Page 31)
DMB09 BOARD (3/4) (Page 33)
DMB09 BOARD (1/4, 4/4) (Page 31, 34)
DMB09 BOARD (2/4) (Page 32)
+5V
RFMON
ADIN
RFZC
RFRPAC
RFRPDC
BOO
TEO
CSO
RFL
FEO
V1P4
V2P8
RF+3.3V
RFIN
RFIP
No mark:FM

5-10. PRINTED WIRING BOARD – MAIN SECTION (SIDE A) –

- See page 21 for Circuit Boards Location.

LF :Uses unleaded solder.


1
2
3
4
5
6
7
8
A
B
C
D
E
【MAIN BOARD】(SIDE A)
IC501
IC503
IC504
IC505
IC506
IC507
IC509
IC510
IC511
IC514
X501
X500
CN509
CN510
CN505
FB500
Ⓘ PANEL BOARD CN800 (Page 40)
(FOR CHECK)
Ⓐ DMB09 BOARD CN201 (Page 29)
1-862-622-
11
(11)

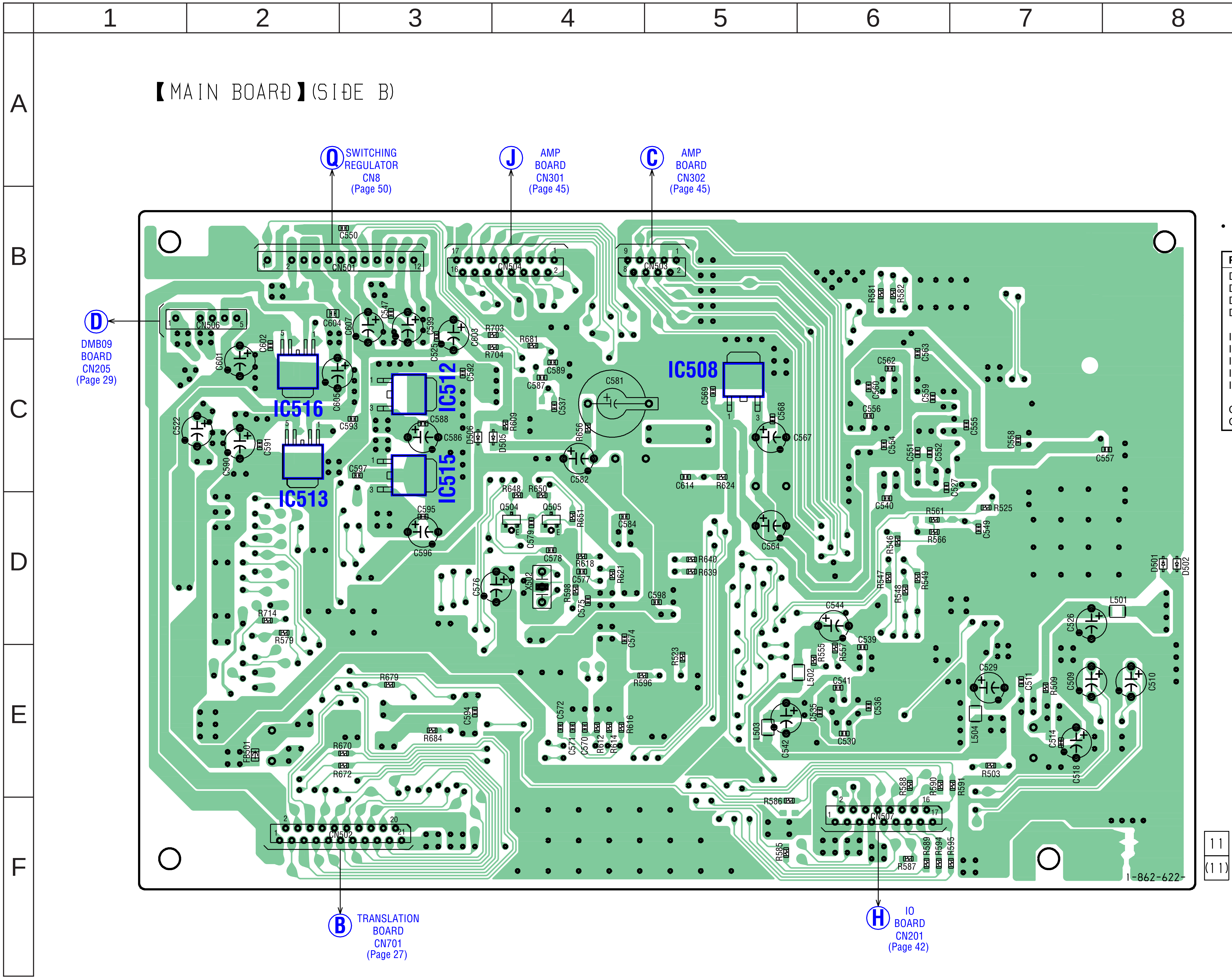
- **Semiconductor Location**

Ref. No.	Location
D503	B-5
D504	B-5
D507	B-5
D509	B-5
IC501	D-2
IC503	E-2
IC504	D-6
IC505	D-4
IC506	B-3
IC507	B-2
IC509	C-5
IC510	D-7
IC511	B-5
IC514	B-5
Q503	B-8
Q506	C-5
Q507	C-4
Q508	C-8
Q509	C-5
Q510	B-8

5-11. PRINTED WIRING BOARD – MAIN SECTION (SIDE B) –

- See page 21 for Circuit Boards Location.

LF :Uses unleaded solder.

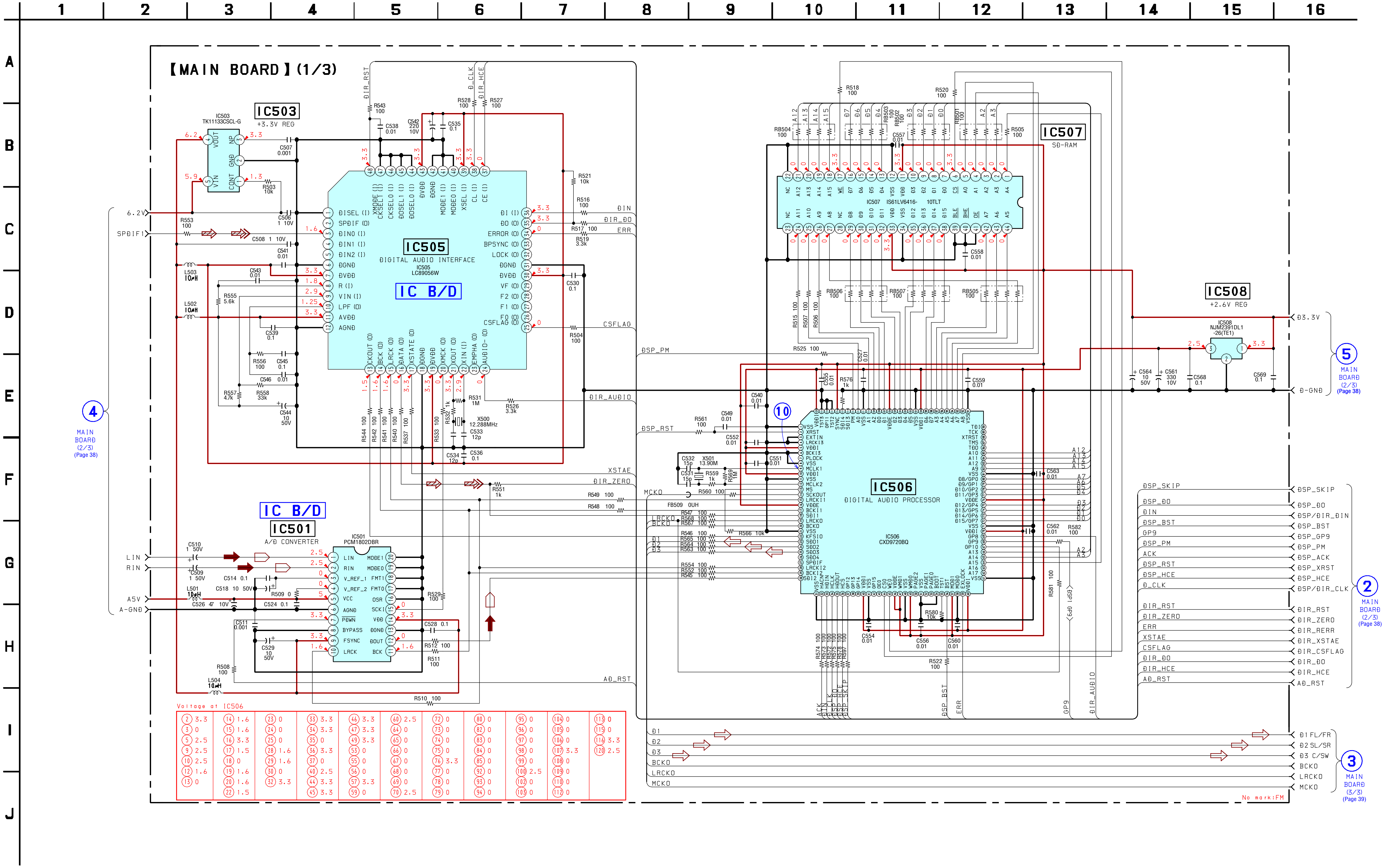

1
2
3
4
5
6
7
8
A
B
C
D
E
F
【MAIN BOARD】(SIDE B)
Q SWITCHING REGULATOR CN8 (Page 50)
J AMP BOARD CN301 (Page 45)
C AMP BOARD CN302 (Page 45)
D DMB09 BOARD CN205 (Page 29)
B TRANSLATION BOARD CN701 (Page 27)
H IO BOARD CN201 (Page 42)
CN501
CN504
CN503
CN506
CN502
CN507
IC516
IC512
IC513
IC515
IC508
Q504
Q505
D501
D502
D505
D506
X502
L501
L502
L503
L504
FB501
1-862-622-
11
(11)

- **Semiconductor Location**

Ref. No.	Location
D501	D-8
D502	D-8
D505	C-4
D506	C-3
IC508	C-5
IC512	C-3
IC513	C-2
IC515	C-3
IC516	C-2
Q504	D-4
Q505	D-4

5-12. SCHEMATIC DIAGRAM – MAIN SECTION (1/3) –

- See page 52, 53 for IC Block Diagrams.
- See page 63 for IC Pin Function Description.
- See page 51 for Waveforms.


1
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9
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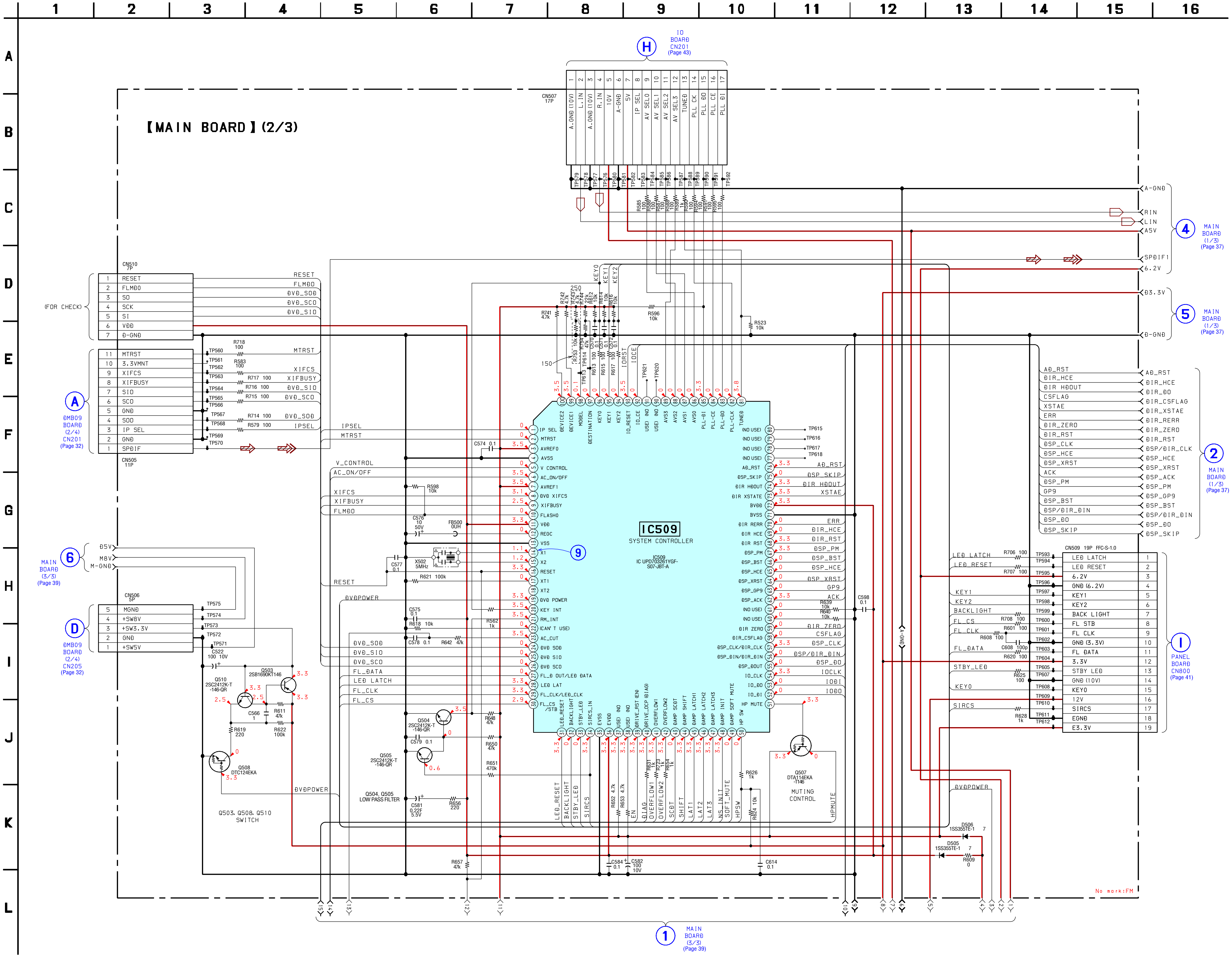
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
【MAIN BOARD】(1/3)
IC503
IC503 TK11133CSCL-G
+3.3V REG
IC505
DIGITAL AUDIO INTERFACE
IC505 LC89056W
IC B/D
IC507
SD-RAM
IC507 IS61LV6416-10TLT
IC508
+2.6V REG
IC508 NJM2391DL1-26(TE1)
IC506
DIGITAL AUDIO PROCESSOR
IC506 CXD9720BQ
IC B/D
IC501
A/D CONVERTER
IC501 PCM1802DBR
X500 12.288MHz
X501 13.90M
4
MAIN BOARD (2/3) (Page 38)
5
MAIN BOARD (2/3) (Page 38)
2
MAIN BOARD (2/3) (Page 38)
3
MAIN BOARD (3/3) (Page 39)
10
6.2V
SPDIF1
LIN
RIN
A5V
A-GND
D3.3V
D-GND
DSP_SKIP
DSP_DO
DSP/DIR_DIN
DSP_BST
DSP_GP9
DSP_PM
DSP_ACK
DSP_XRST
DSP_HCE
DSP/DIR_CLK
DIR_RST
DIR_ZERO
DIR_RERR
DIR_XSTATE
DIR_CSFLAG
DIR_DO
DIR_HCE
AD_RST
D1 FL/FR
D2 SL/SR
D3 C/SW
BCKO
LRCKO
MCKO
No mark:FM

Voltage at IC506

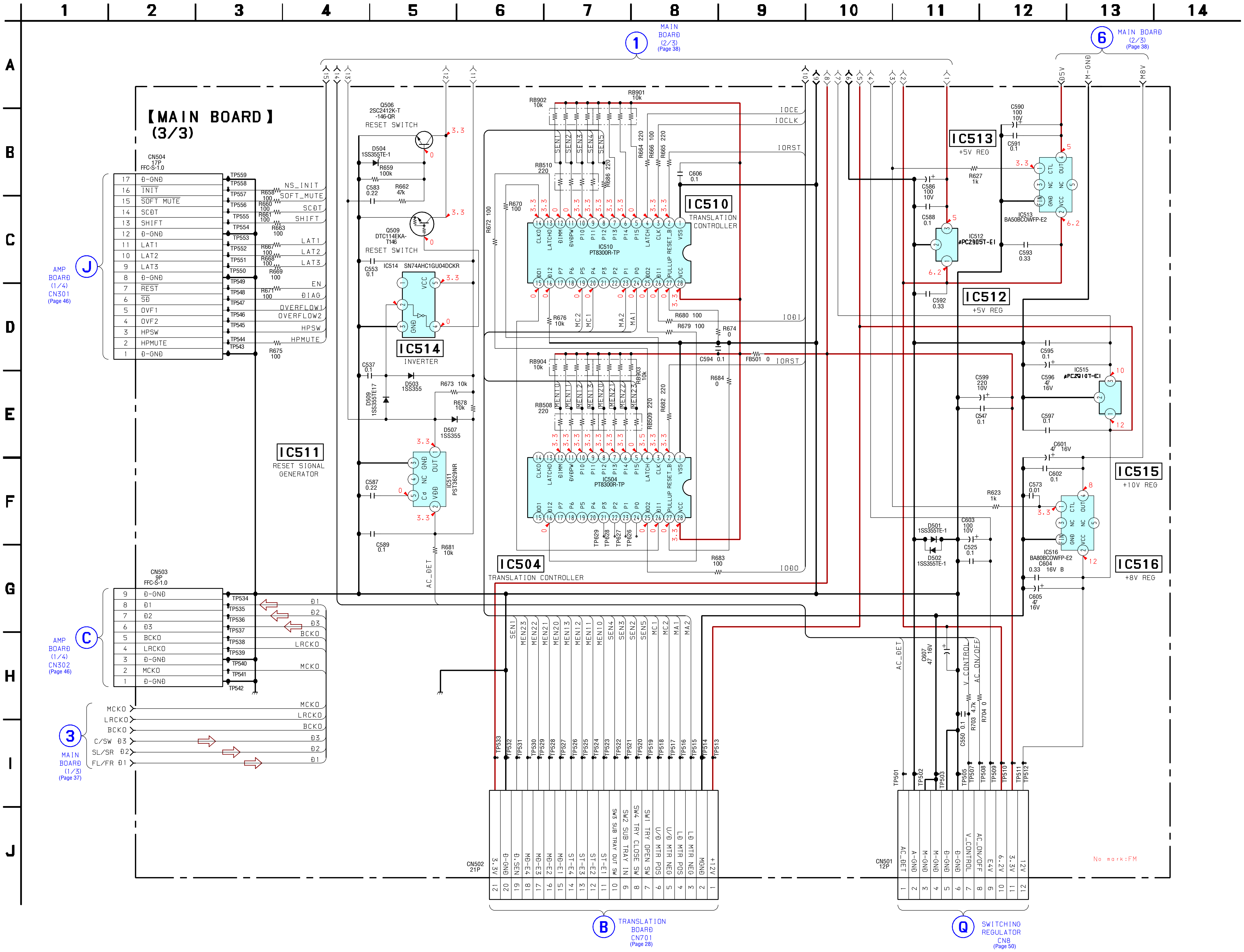
② 3.3	⑭ 1.6	㉓ 0	㉝ 3.3	㊻ 3.3	(60) 2.5	(72) 0	(80) 0	(95) 0	(104) 0	(113) 0
③ 0	⑮ 1.6	㉔ 0	㉞ 3.3	㊼ 3.3	(64) 0	(73) 0	(82) 0	(96) 0	(105) 0	(115) 0
⑤ 2.5	⑯ 3.3	㉕ 0	㉟ 0	㊾ 3.3	(65) 0	(74) 0	(83) 0	(97) 0	(106) 0	(116) 3.3
⑨ 2.5	⑰ 1.5	㉘ 1.6	㊱ 3.3	(53) 0	(66) 0	(75) 0	(84) 0	(98) 0	(107) 3.3	(120) 2.5
⑩ 2.5	⑱ 0	㉙ 1.6	㊲ 0	(55) 0	(67) 0	(76) 3.3	(85) 0	(99) 0	(108) 0	
⑫ 1.6	⑲ 1.6	㉚ 0	㊵ 2.5	(56) 0	(68) 0	(77) 0	(92) 0	(100) 2.5	(109) 0	
⑬ 0	⑳ 1.6	㉜ 3.3	㊹ 3.3	(57) 3.3	(69) 0	(78) 0	(93) 0	(102) 0	(110) 0	
	㉒ 1.5		㊺ 3.3	(59) 0	(70) 2.5	(79) 0	(94) 0	(103) 0	(112) 0	

5-13. SCHEMATIC DIAGRAM – MAIN SECTION (2/3) –

- See page 66 for IC Pin Function Description.
- See page 51 for Waveforms.


【MAIN BOARD】(2/3)
IO BOARD CN201 (Page 43)
CN507 17P
A.GND (10V)
L.IN
A.GND (10V)
R.IN
10V
A-GND
5V
IP SEL
AV SEL0
AV SEL1
AV SEL2
AV SEL3
TUNED
PLL CK
PLL DO
PLL CE
PLL DI
A-GND
RIN
LIN
A5V
SPDIFI
6.2V
D3.3V
D-GND
MAIN BOARD (1/3) (Page 37)
CN510 7P
RESET
FLMDO
SO
SCK
SI
VDD
D-GND
(FOR CHECK)
CN505 11P
MTRST
3.3VMNT
XIFCS
XIFBUSY
SIO
GND
SOO
IP SEL
GND
SPDIF
DMB09 BOARD (2/4) CN201 (Page 32)
MAIN BOARD (3/3) (Page 39)
D5V
M8V
M-GND
CN506 5P
MGND
+SW8V
+SW3.3V
GND
+SW5V
DMB09 BOARD (2/4) CN205 (Page 32)
IC509
SYSTEM CONTROLLER
IC509
IC UPD703261YGF-S07-JBT-A
X502 5MHz
Q503 2SB1690KT146
Q510 2SC2412K-T-146-QR
Q508 DTC124EKA
Q503, Q508, Q510 SWITCH
Q504 2SC2412K-T-146-QR
Q505 2SC2412K-T-146-QR
Q504, Q505 LOW PASS FILTER
Q507 DTA114EKA-T146
MUTING CONTROL
AD_RST
DIR_HCE
DIR_HDOUT
CSFLAG
XSTAE
ERR
DIR_ZERO
DIR_RST
DSP_CLK
DSP_HCE
DSP_XRST
ACK
DSP_PM
GP9
DSP_BST
DSP/DIR_DIN
DSP_DO
DSP_SKIP
MAIN BOARD (1/3) (Page 37)
CN509 19P FFC-S-1.0
LED LATCH
LED RESET
6.2V
GND (6.2V)
KEY1
KEY2
BACK LIGHT
FL STB
FL CLK
GND (3.3V)
FL DATA
3.3V
STBY LED
GND (10V)
KEY0
12V
SIRCS
EGND
E3.3V
PANEL BOARD CN800 (Page 41)
D506 1SS355TE-1
D505 1SS355TE-1
MAIN BOARD (3/3) (Page 39)
No mark:FM

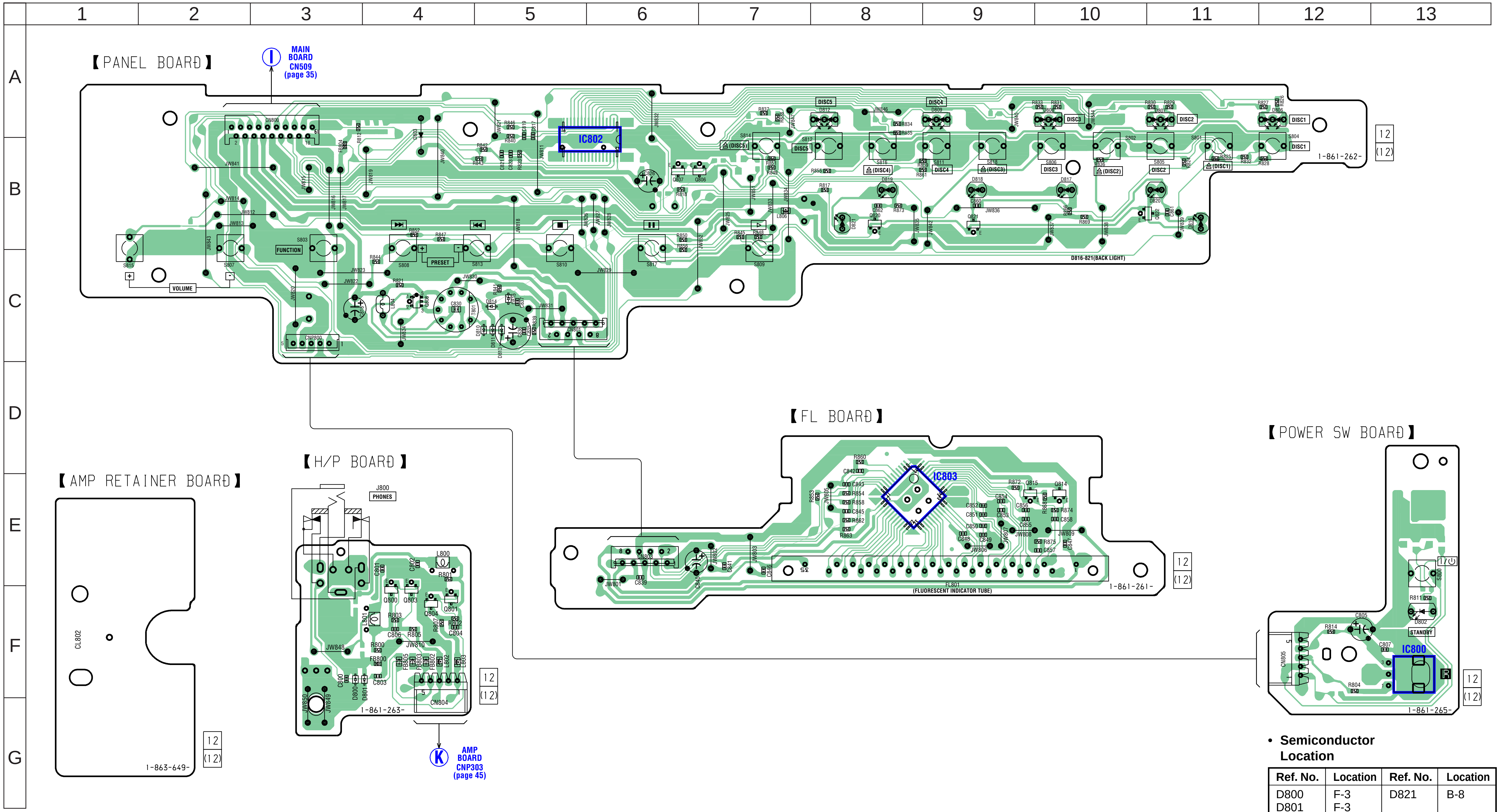
5-14. SCHEMATIC DIAGRAM – MAIN SECTION (3/3) –



【MAIN BOARD】
(3/3)
MAIN BOARD (2/3) (Page 38)
MAIN BOARD (2/3) (Page 38)
AMP BOARD (1/4) CN301 (Page 46)
AMP BOARD (1/4) CN302 (Page 46)
MAIN BOARD (1/3) (Page 37)
TRANSLATION BOARD CN701 (Page 28)
SWITCHING REGULATOR CN8 (Page 50)
CN504 17P FFC-S-1.0
CN503 9P FFC-S-1.0
CN502 21P
CN501 12P
IC510 TRANSLATION CONTROLLER
IC510 PT8300R-TP
IC504 TRANSLATION CONTROLLER
IC504 PT8300R-TP
IC511 RESET SIGNAL GENERATOR
IC511 PST3629NR
IC514 INVERTER
IC514 SN74AHC1GU04DCKR
IC513 +5V REG
IC513 BA50BC0WFP-E2
IC512 +5V REG
IC512 μPC2905T-E1
IC515 +10V REG
IC515 μPC2910T-E1
IC516 +8V REG
IC516 BA80BC0WFP-E2
Q506 2SC2412K-T-146-QR RESET SWITCH
Q509 DTC114EKA-T146 RESET SWITCH
D504 1SS355TE-1
D503 1SS355
D509 1SS355TE17
D507 1SS355
D501 1SS355TE-1
D502 1SS355TE-1
RB901 10k
RB902 10k
RB904 10k
RB903 10k
RB510 220
RB508 220
RB509 220
FB501 0
IOCE
IOCLK
IORST
IODI
IODO
NS_INIT
SOFT_MUTE
SCDT
SHIFT
LAT1
LAT2
LAT3
EN
DIAG
OVERFLOW1
OVERFLOW2
HPSW
HPMUTE
D-GND
INIT
SOFT MUTE
REST
SD
OVF1
OVF2
HPSW
HPMUTE
D1
D2
D3
BCKO
LRCKO
MCKO
C/SW D3
SL/SR D2
FL/FR D1
AC_DET
V_CONTROL
AC_ON/OFF
D5V
M-GND
M8V
3.3V
D-GND
D.SEN
MD-E4
MD-E3
MD-E2
MD-E1
ST-E4
ST-E3
ST-E2
ST-E1
SW3 SUB TRAY OUT SW
SW2 SUB TRAY IN
SW4 TRY CLOSE SW
SW1 TRY OPEN SW
U/D MTR POS
U/D MTR NEG
LD MTR POS
LD MTR NEG
MGND
+12V
AC_DET
A-GND
M-GND
M-GND
D-GND
D-GND
V_CONTROL
AC_ON/OFF
E4V
6.2V
3.3V
12V
No mark:FM

5-15. PRINTED WIRING BOARD – PANEL/FL/POWER SW/H/P/AMP RETAINER SECTION –

• See page 21 for Circuit Boards Location. LF :Uses unleaded solder.


1
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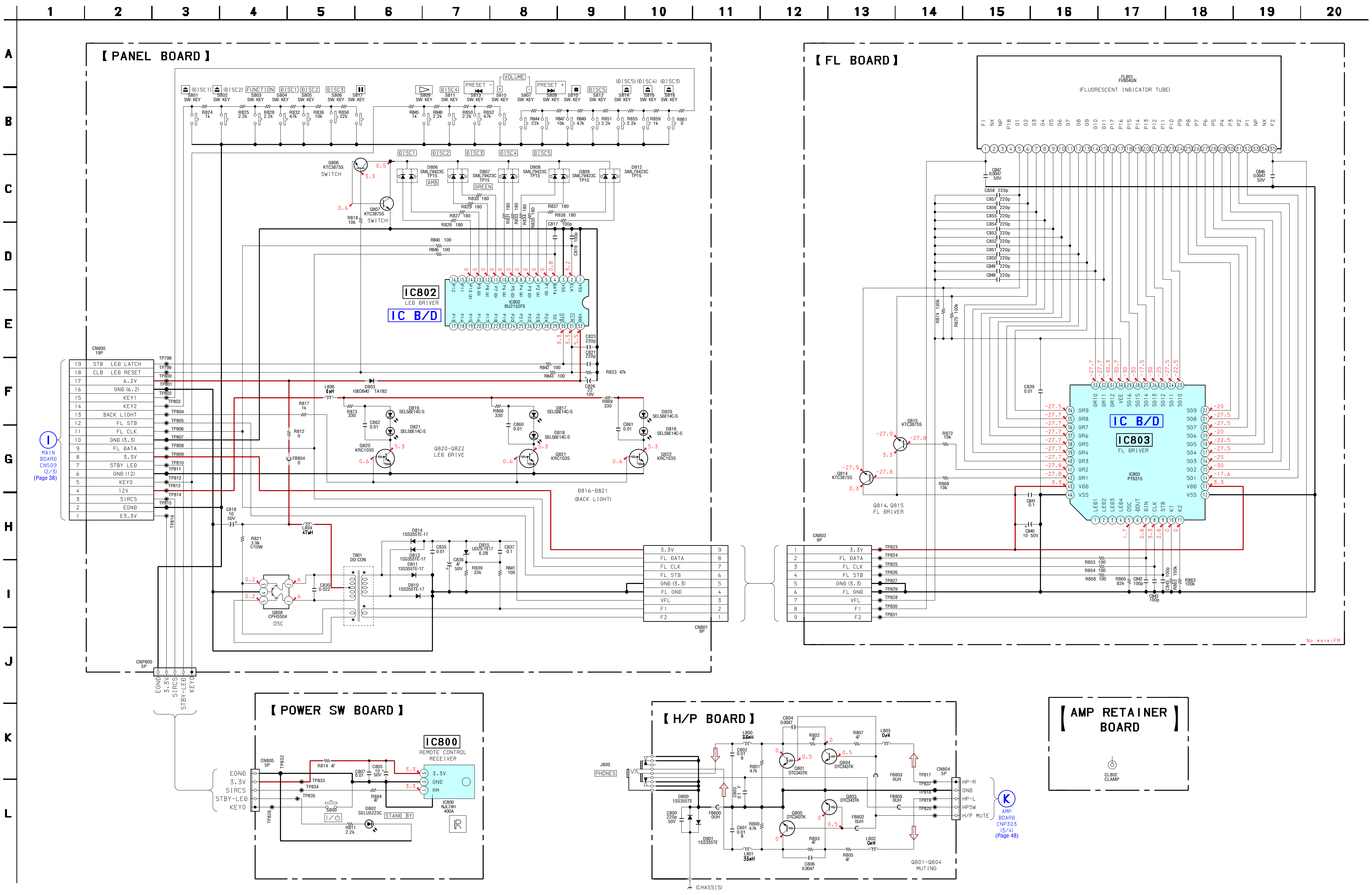
10
11
12
13
A
B
C
D
E
F
G
【PANEL BOARD】
I MAIN BOARD CN509 (page 35)
CN800
IC802
DISC1
DISC2
DISC3
DISC4
DISC5
VOLUME
FUNCTION
PRESET
CNP800
CN801
D816-821(BACK LIGHT)
1-861-262-
12
(12)
【FL BOARD】
IC803
CN803
FL801 (FLUORESCENT INDICATOR TUBE)
1-861-261-
12
(12)
【POWER SW BOARD】
STANDBY
IC800
CN805
1-861-265-
12
(12)
【H/P BOARD】
J800
PHONES
CN804
1-861-263-
12
(12)
K AMP BOARD CNP303 (page 45)
【AMP RETAINER BOARD】
CL802
1-863-649-
12
(12)

- **Semiconductor Location**

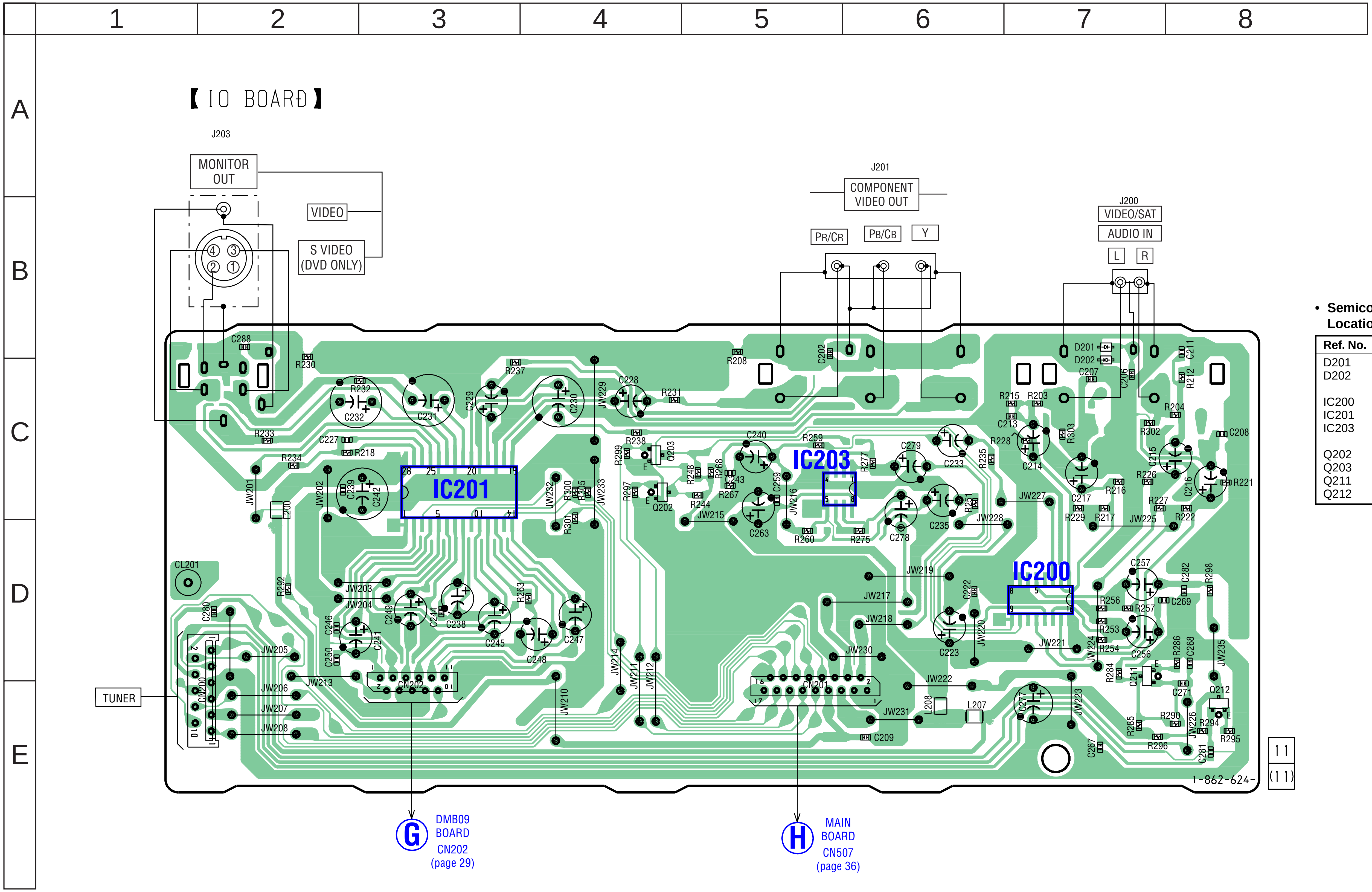
Ref. No.	Location	Ref. No.	Location
D800	F-3	D821	B-8
D801	F-3		
D802	F-13	IC800	F-13
D803	A-4	IC802	A-6
D806	A-12	IC803	E-9
D807	A-11		
D808	A-10	Q800	F-4
D809	A-9	Q801	F-4
D810	C-5	Q803	F-4
D811	C-5	Q804	F-4
D812	A-8	Q806	B-7
D813	C-5	Q807	B-6
D814	C-5	Q808	C-4
D815	C-5	Q814	E-10
D816	B-11	Q815	E-9
D817	B-10	Q820	B-8
D818	B-9	Q821	B-9
D819	B-8	Q822	B-11
D820	B-11		

5-16. SCHEMATIC DIAGRAM – PANEL/FL/POWER SW/H/P/AMP RETAINER SECTION –

• See page 52, 55 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
A B C D E F G H I J K L
【 PANEL BOARD 】
【 FL BOARD 】
【 POWER SW BOARD 】
【 H/P BOARD 】
【 AMP RETAINER BOARD 】
IC802
LED DRIVER
IC B/D
IC802 BU2152FS
IC803
FL DRIVER
IC B/D
IC803 PT6315
IC800
REMOTE CONTROL RECEIVER
IC800 NJL74H 400A
FL801 FV804GN
(FLUORESCENT INDICATOR TUBE)
CN800 19P
CN801 9P
CN803 9P
CNP800 5P
CN805 5P
CN804 5P
J800 PHONES
STB LED LATCH
CLB LED RESET
6.2V
GND (6.2)
KEY1
KEY2
BACK LIGHT
FL STB
FL CLK
GND (3.3)
FL DATA
3.3V
STBY LED
GND (12)
KEY0
12V
SIRCS
EGND
E3.3V
MAIN BOARD CN509 (2/3) (Page 38)
AMP BOARD CNP303 (3/4) (Page 48)
Q806 KTC3875S SWITCH
Q807 KTC3875S SWITCH
Q820-Q822 LED DRIVE
D816-D821 (BACK LIGHT)
Q814, Q815 FL DRIVER
Q808 CPH5504 OSC
T801 DC CON
Q801-Q804 MUTING
S800 I/⏻
D802 SELU5223C STAND BY
CL802 CLAMP
HP-R GND HP-L HPSW H/P MUTE
(CHASSIS)
No mark:FM

5-17. PRINTED WIRING BOARD – IO SECTION – • See page 21 for Circuit Boards Location. ⊞ :Uses unleaded solder.

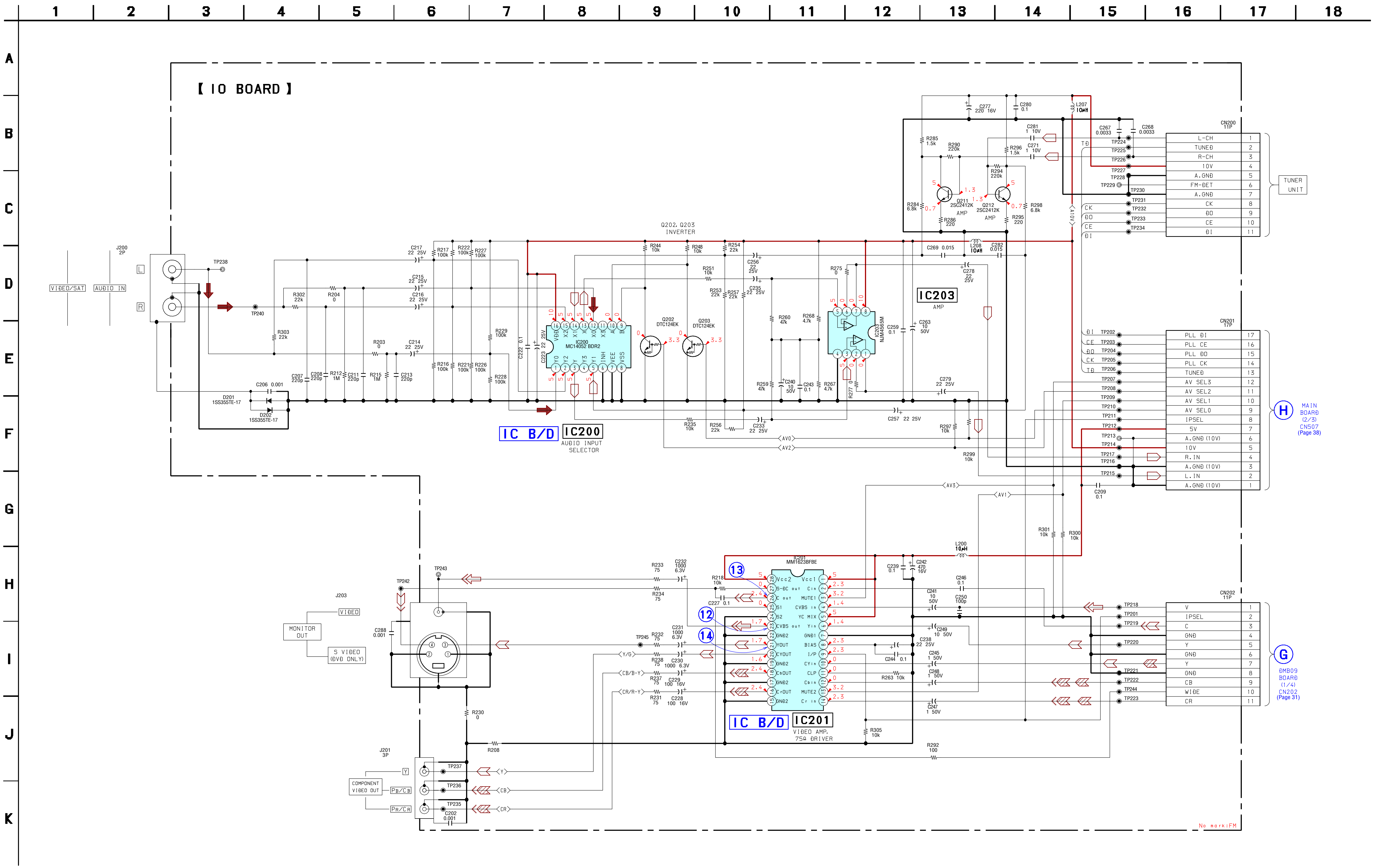

1
2
3
4
5
6
7
8
A
B
C
D
E
【 IO BOARD 】
J203
MONITOR OUT
VIDEO
S VIDEO (DVD ONLY)
J201
COMPONENT VIDEO OUT
PR/CR
PB/CB
Y
J200
VIDEO/SAT
AUDIO IN
L
R
TUNER
CN200
CN202
CN201
IC201
IC203
IC200
Q202
Q203
Q211
Q212
D201
D202
CL201
L200
L207
L208
1-862-624-
11
(11)
G
DMB09 BOARD
CN202
(page 29)
H
MAIN BOARD
CN507
(page 36)

- **Semiconductor Location**

Ref. No.	Location
D201	B-7
D202	B-7
IC200	D-7
IC201	C-3
IC203	C-5
Q202	C-4
Q203	C-4
Q211	D-7
Q212	E-8

5-18. SCHEMATIC DIAGRAM – IO SECTION –

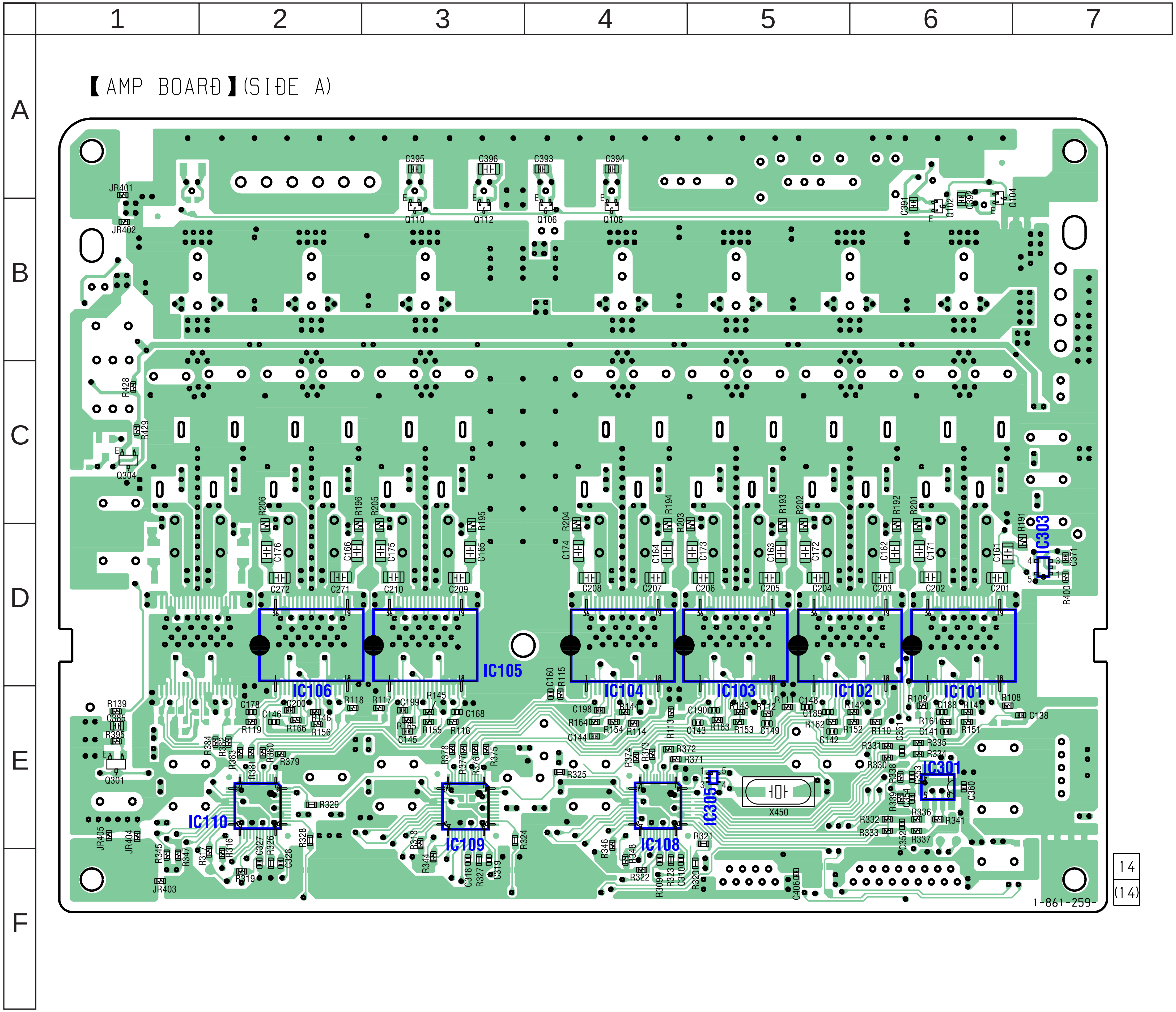
• See page 54 for IC Block Diagrams. • See page 51 for Waveforms.


[IO BOARD]
J200 2P
VIDEO/SAT
AUDIO IN
L
R
TP238
TP240
D201 1SS355TE-17
D202 1SS355TE-17
IC200 MC14052 BDR2
IC B/D
IC200
AUDIO INPUT SELECTOR
Q202, Q203 INVERTER
Q202 DTC124EK
Q203 DTC124EK
IC203 NJM4565M
IC203
AMP
Q211 2SC2412K AMP
Q212 2SC2412K AMP
L207 10µH
L208 10µH
L200 10µH
CN200 11P
L-CH
TUNED
R-CH
10V
A.GND
FM-DET
A.GND
CK
DO
CE
DI
TUNER UNIT
CN201 17P
PLL DI
PLL CE
PLL DO
PLL CK
TUNED
AV SEL3
AV SEL2
AV SEL1
AV SEL0
IPSEL
5V
A.GND (10V)
10V
R.IN
A.GND (10V)
L.IN
A.GND (10V)
H
MAIN BOARD (2/3) CN507 (Page 38)
AV0
AV1
AV2
AV3
IC201 MM1623BFBE
IC B/D
IC201
VIDEO AMP, 75Ω DRIVER
13
12
14
CN202 11P
V
IPSEL
C
GND
Y
GND
Y
GND
CB
WIDE
CR
G
DMB09 BOARD (1/4) CN202 (Page 31)
J203
VIDEO
MONITOR OUT
S VIDEO (DVD ONLY)
J201 3P
COMPONENT VIDEO OUT
Y
PB/CB
PR/CR
TP235
TP236
TP237
TP242
TP243
TP245
No mark:FM

5-19. PRINTED WIRING BOARD – AMP SECTION (SIDE A) –

- See page 21 for Circuit Boards Location.

LF :Uses unleaded solder.

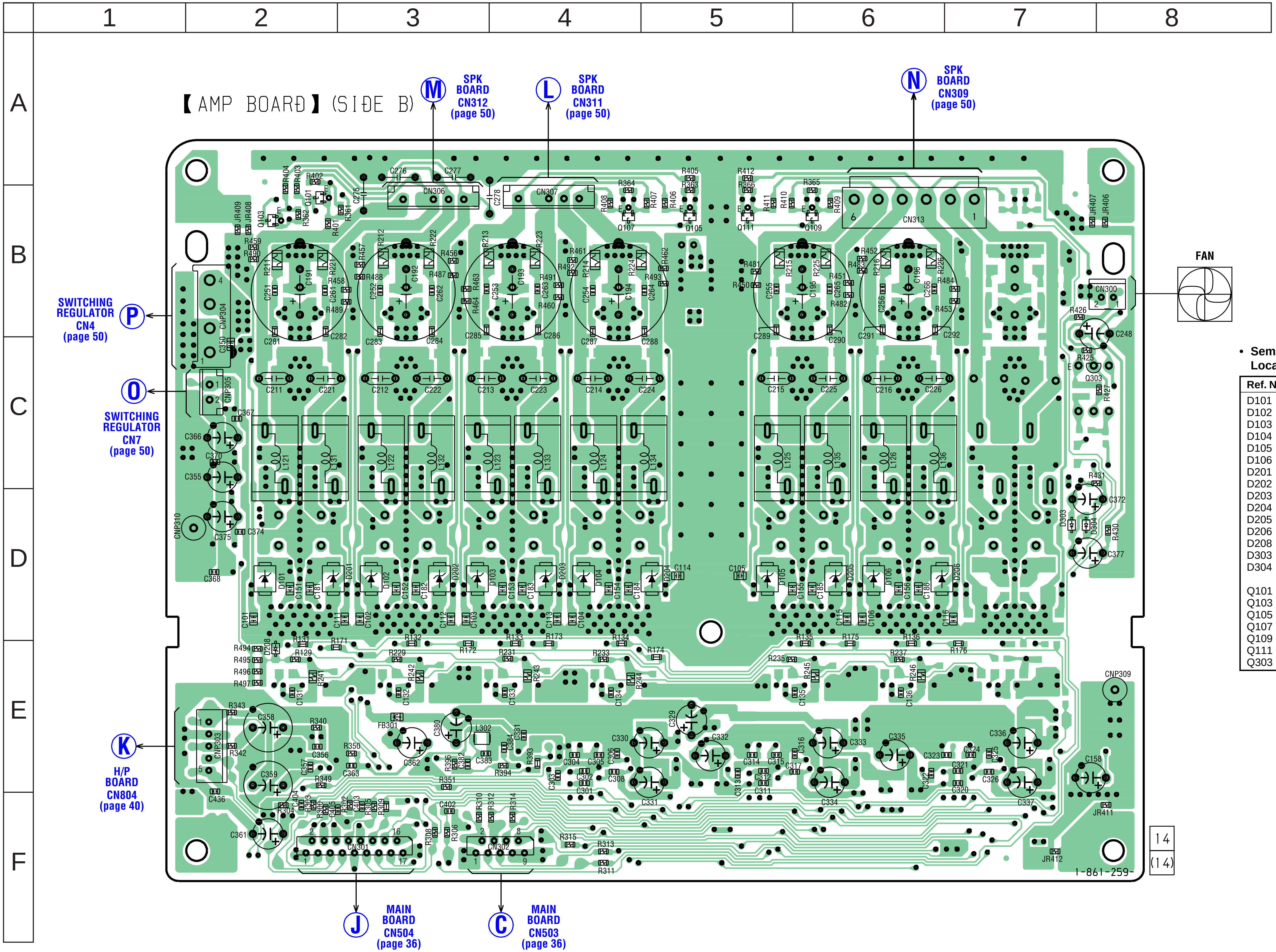

1
2
3
4
5
6
7
A
B
C
D
E
F
【AMP BOARD】(SIDE A)
IC101
IC102
IC103
IC104
IC105
IC106
IC108
IC109
IC110
IC301
IC303
IC305
Q102
Q104
Q106
Q108
Q110
Q112
Q301
Q304
X450
JR401
JR402
JR403
JR404
JR405
1-861-259-
14
(14)

- Semiconductor Location

Ref. No.	Location
IC101	E-6
IC102	E-6
IC103	E-5
IC104	E-4
IC105	D-3
IC106	E-2
IC108	E-4
IC109	E-3
IC110	E-2
IC301	E-6
IC303	D-7
IC305	E-5
Q102	B-6
Q104	A-6
Q106	B-4
Q108	B-4
Q110	B-3
Q112	B-3
Q301	E-1
Q304	C-1

5-20. PRINTED WIRING BOARD – AMP SECTION (SIDE B) –

• See page 21 for Circuit Boards Location. LF :Uses unleaded solder.


1
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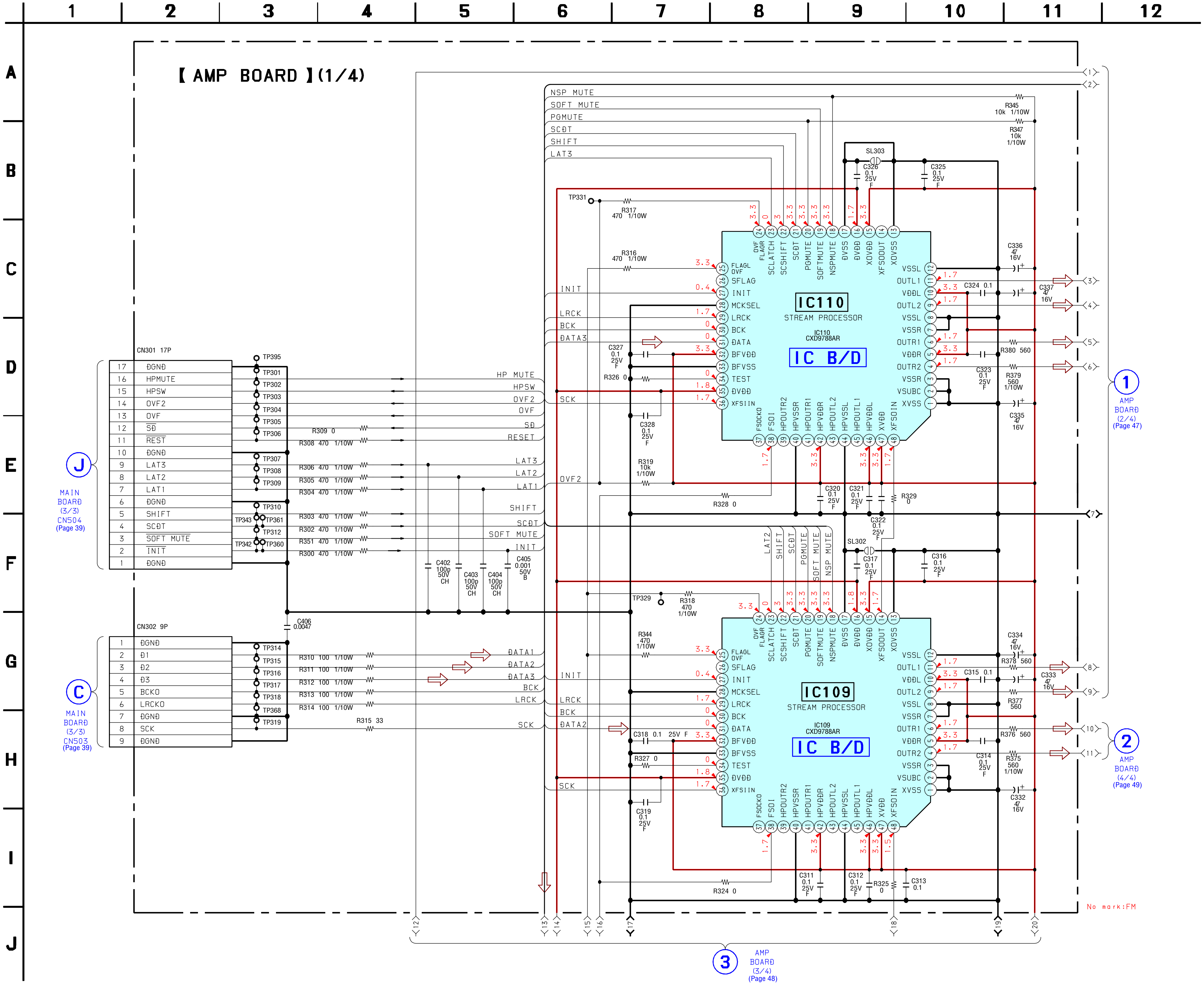
7
8
A
B
C
D
E
F
【AMP BOARD】(SIDE B)
M SPK BOARD CN312 (page 50)
L SPK BOARD CN311 (page 50)
N SPK BOARD CN309 (page 50)
P SWITCHING REGULATOR CN4 (page 50)
O SWITCHING REGULATOR CN7 (page 50)
K H/P BOARD CN804 (page 40)
J MAIN BOARD CN504 (page 36)
C MAIN BOARD CN503 (page 36)
FAN
CN306
CN307
CN313
CN300
CNP304
CNP305
CNP303
CNP309
CNP310
CN301
CN302
14
(14)
1-861-259-

• Semiconductor Location

Ref. No.	Location
D101	D-2
D102	D-3
D103	D-3
D104	D-4
D105	D-5
D106	D-6
D201	D-2
D202	D-3
D203	D-4
D204	D-5
D205	D-6
D206	D-7
D208	E-2
D303	D-7
D304	D-8
Q101	B-2
Q103	B-2
Q105	B-5
Q107	B-4
Q109	B-6
Q111	B-5
Q303	C-8

5-21. SCHEMATIC DIAGRAM – AMP SECTION (1/4) – • See page 54 for IC Block Diagrams.


1
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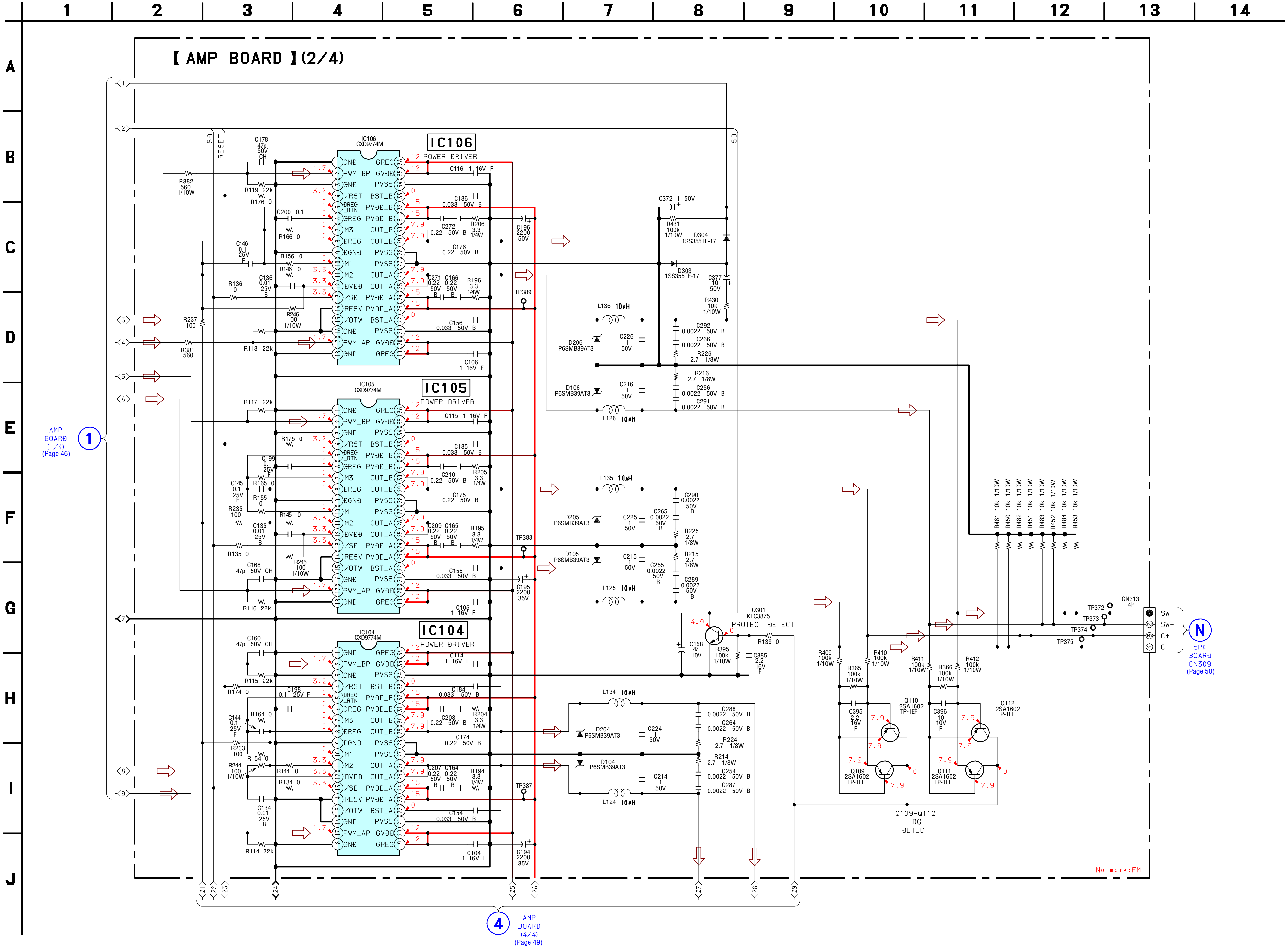
9
10
11
12
A
B
C
D
E
F
G
H
I
J
【 AMP BOARD 】(1/4)
CN301 17P
DGND
HPMUTE
HPSW
OVF2
OVF
SD
REST
DGND
LAT3
LAT2
LAT1
DGND
SHIFT
SCDT
SOFT MUTE
INIT
DGND
CN302 9P
DGND
D1
D2
D3
BCKO
LRCKO
DGND
SCK
DGND
J
MAIN BOARD (3/3) CN504 (Page 39)
C
MAIN BOARD (3/3) CN503 (Page 39)
NSP MUTE
SOFT MUTE
PGMUTE
SCDT
SHIFT
LAT3
HP MUTE
HPSW
OVF2
OVF
SD
RESET
INIT
LRCK
BCK
DATA3
SCK
OVF2
DATA1
DATA2
DATA3
DATA2
IC110
STREAM PROCESSOR
IC110 CXD9788AR
IC B/D
IC109
STREAM PROCESSOR
IC109 CXD9788AR
IC B/D
FLAGL OVF
SFLAG
INIT
MCKSEL
LRCK
BCK
DATA
BFVDD
BFVSS
TEST
DVDD
XFS1IN
VSSL
OUTL1
VDDL
OUTL2
VSSL
VSSR
OUTR1
VDDR
OUTR2
VSSR
VSUBC
XVSS
SL303
SL302
TP331
TP329
R345 10k 1/10W
R347 10k 1/10W
1
AMP BOARD (2/4) (Page 47)
2
AMP BOARD (4/4) (Page 49)
3
AMP BOARD (3/4) (Page 48)
No mark:FM

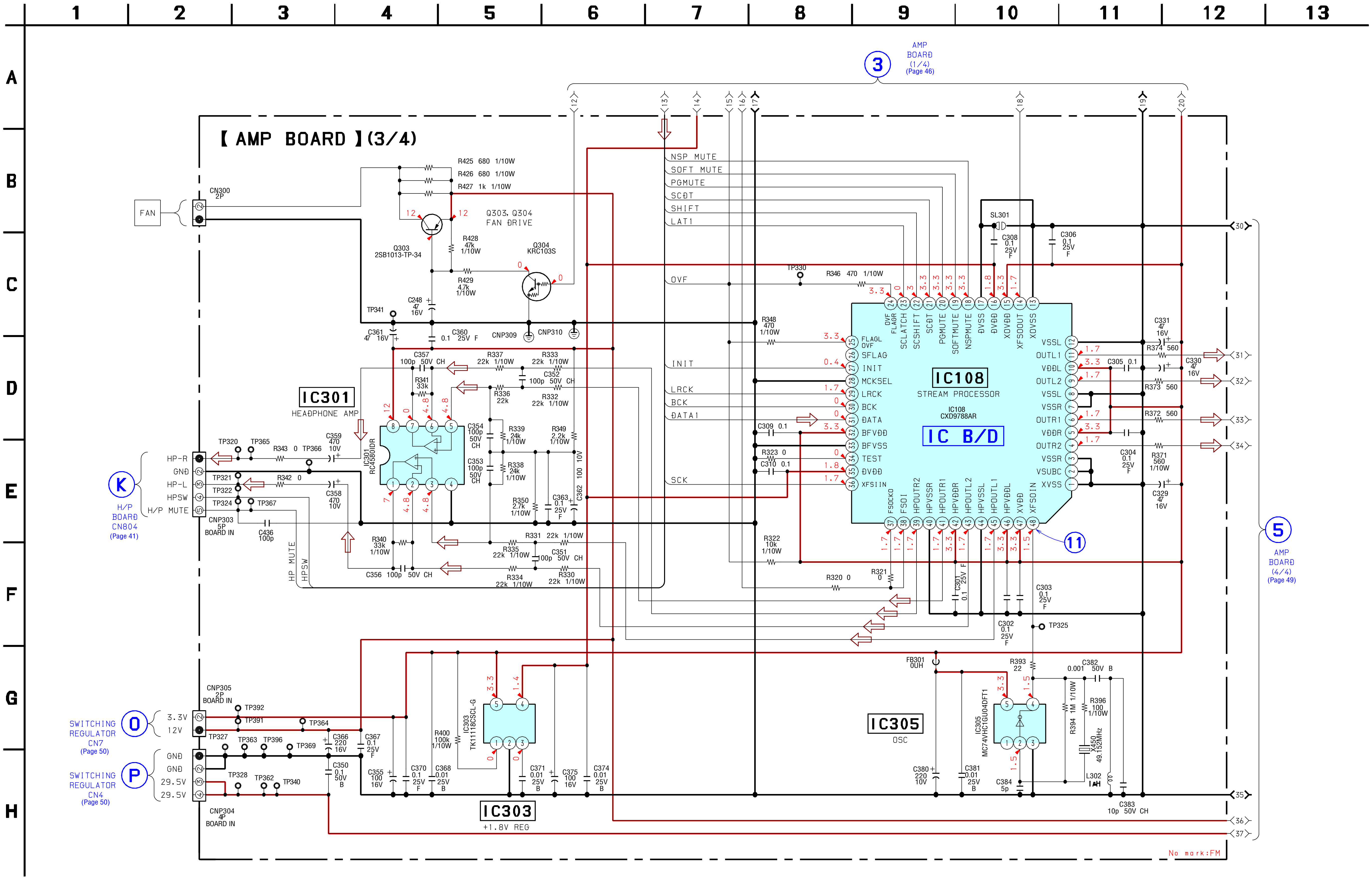
5-22. SCHEMATIC DIAGRAM – AMP SECTION (2/4) –

• See page 69 for IC Pin Function Description.


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
【 AMP BOARD 】(2/4)
IC106
CXD9774M
POWER DRIVER
IC105
CXD9774M
POWER DRIVER
IC104
CXD9774M
POWER DRIVER
AMP BOARD (1/4) (Page 46)
N SPK BOARD CN309 (Page 50)
4 AMP BOARD (4/4) (Page 49)
CN313 4P
SW+
SW−
C+
C−
Q301 KTC3875 PROTECT DETECT
Q109-Q112 DC DETECT
Q109 2SA1602 TP-1EF
Q110 2SA1602 TP-1EF
Q111 2SA1602 TP-1EF
Q112 2SA1602 TP-1EF
D303 1SS355TE-17
D304 1SS355TE-17
TP387
TP388
TP389
TP372
TP373
TP374
TP375
L124 10μH
L125 10μH
L126 10μH
L134 10μH
L135 10μH
L136 10μH
No mark:FM

5-23. SCHEMATIC DIAGRAM – AMP SECTION (3/4) –

• See page 54 for IC Block Diagrams. • See page 51 for Waveforms.


1
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9
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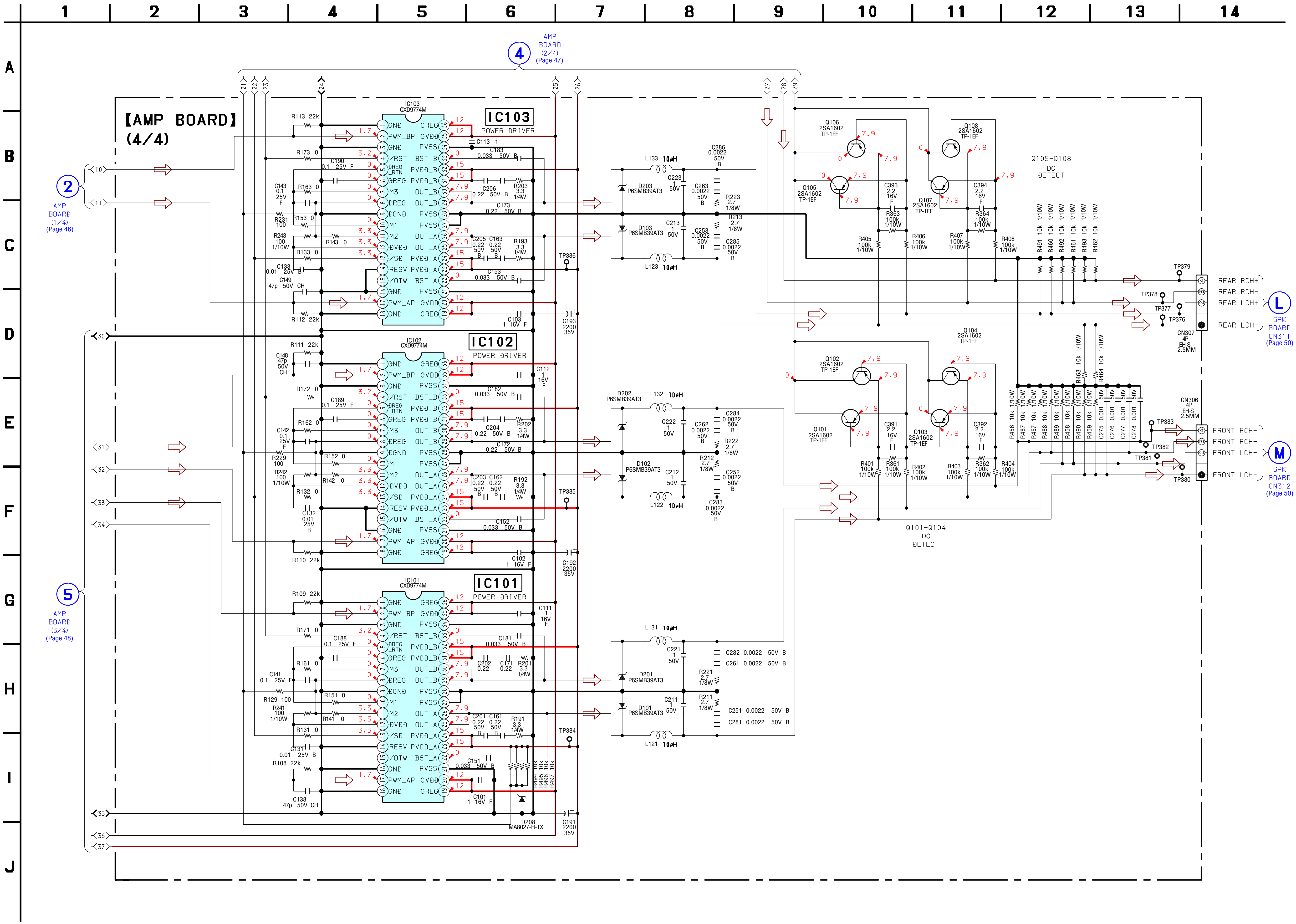
11
12
13
A
B
C
D
E
F
G
H
【 AMP BOARD 】(3/4)
AMP BOARD (1/4) (Page 46)
AMP BOARD (4/4) (Page 49)
H/P BOARD CN804 (Page 41)
SWITCHING REGULATOR CN7 (Page 50)
SWITCHING REGULATOR CN4 (Page 50)
FAN
CN300 2P
R425 680 1/10W
R426 680 1/10W
R427 1k 1/10W
Q303, Q304 FAN DRIVE
Q303 2SB1013-TP-34
Q304 KRC103S
R428 47k 1/10W
R429 4.7k 1/10W
C248 47 16V
TP341
C361 47 16V
C360 0.1 25V F
CNP309
CNP310
IC301 HEADPHONE AMP
IC301 RC4580IDR
HP-R
GND
HP-L
HPSW
H/P MUTE
CNP303 5P BOARD IN
TP320
TP365
TP366
TP321
TP322
TP324
TP367
R343 0
R342 0
C359 470 10V
C358 470 10V
C436 100p
HP MUTE
HPSW
C357 100p 50V CH
R341 33k
R337 22k 1/10W
R333 22k 1/10W
C352 100p 50V CH
R336 22k
R332 22k 1/10W
C354 100p 50V CH
C353 100p 50V CH
R339 24k 1/10W
R338 24k 1/10W
R349 2.2k 1/10W
R350 2.7k 1/10W
C363 0.1 25V F
C362 100 10V
R340 33k 1/10W
R331 22k 1/10W
R335 22k 1/10W
C351 100p 50V CH
C356 100p 50V CH
R334 22k 1/10W
R330 22k 1/10W
NSP MUTE
SOFT MUTE
PGMUTE
SCDT
SHIFT
LAT1
OVF
INIT
LRCK
BCK
DATA1
SCK
TP330
R346 470 1/10W
R348 470 1/10W
SL301
C308 0.1 25V F
C306 0.1 25V F
C331 47 16V
R374 560
C305 0.1
C330 47 16V
R373 560
R372 560
C304 0.1 25V F
R371 560 1/10W
C329 47 16V
C309 0.1
R323 0
C310 0.1
R322 10k 1/10W
R320 0
R321 0
C301 0.1 25V F
C303 0.1 25V F
C302 0.1 25V F
TP325
IC108 STREAM PROCESSOR
IC108 CXD9788AR
IC B/D
OVF FLAGR
SCLATCH
SCSHIFT
SCDT
PGMUTE
SOFTMUTE
NSPMUTE
DVSS
DVDD
XDVDD
XFSOOUT
XOVSS
FLAGL OVF
SFLAG
INIT
MCKSEL
LRCK
BCK
DATA
BFVDD
BFVSS
TEST
DVDD
XFSIIN
VSSL
OUTL1
VDDL
OUTL2
VSSL
VSSR
OUTR1
VDDR
OUTR2
VSSR
VSUBC
XVSS
FSOCKO
FSOI
HPOUTR2
HPVSSR
HPOUTR1
HPVDDR
HPOUTL2
HPVSSL
HPOUTL1
HPVDDL
XVDD
XFSOIN
No mark:FM
CNP305 2P BOARD IN
3.3V
12V
GND
GND
29.5V
29.5V
TP392
TP391
TP364
TP327
TP363
TP396
TP369
TP328
TP362
TP340
CNP304 4P BOARD IN
C366 220 16V
C367 0.1 25V F
C350 0.1 50V B
C355 100 16V
C370 0.1 25V F
C368 0.01 25V B
R400 100k 1/10W
IC303 TK11118CSCL-G
C371 0.01 25V B
C375 100 16V
C374 0.01 25V B
IC303 +1.8V REG
IC305 OSC
IC305 MC74VHC1GU04DFT1
FB301 0UH
R393 22
C382 0.001 50V B
R394 1M 1/10W
R396 100 1/10W
X150 49.152MHz
L302 1µH
C380 220 10V
C381 0.01 25V B
C384 5p
C383 10p 50V CH

5-24. SCHEMATIC DIAGRAM – AMP SECTION (4/4) –

- See page 69 for IC Pin Function Description.


1
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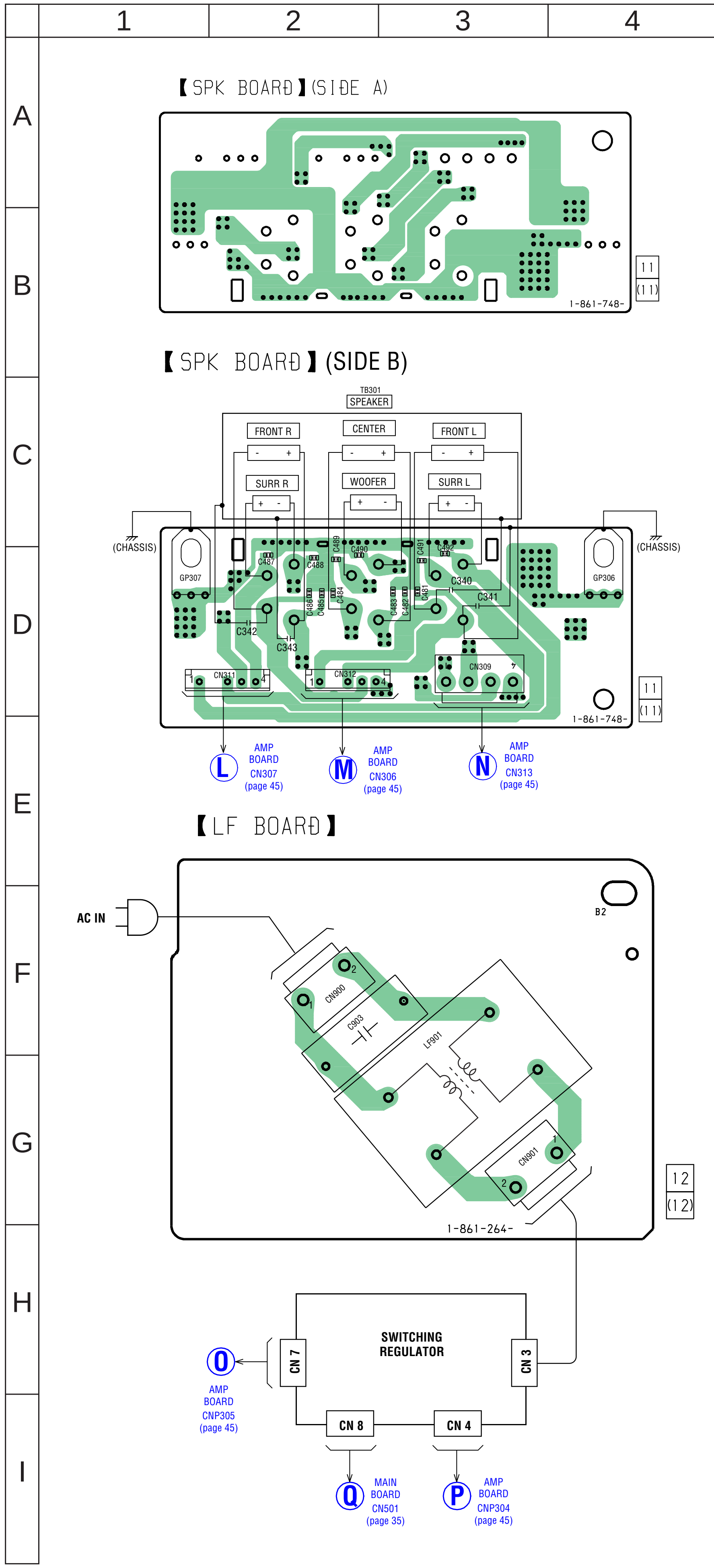
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
【AMP BOARD】
(4/4)
4
AMP BOARD (2/4) (Page 47)
2
AMP BOARD (1/4) (Page 46)
5
AMP BOARD (3/4) (Page 48)
IC103
CXD9774M
POWER DRIVER
IC102
CXD9774M
POWER DRIVER
IC101
CXD9774M
POWER DRIVER
GND
PWM_BP
/RST
DREG RTN
GREG
M3
DGND
M1
M2
DVDD
/SD
RESV
/OTW
PWM_AP
GVDD
PVSS
BST_B
PVDD_B
OUT_B
OUT_A
PVDD_A
BST_A
Q105-Q108
DC DETECT
Q101-Q104
DC DETECT
Q101 2SA1602 TP-1EF
Q102 2SA1602 TP-1EF
Q103 2SA1602 TP-1EF
Q104 2SA1602 TP-1EF
Q105 2SA1602 TP-1EF
Q106 2SA1602 TP-1EF
Q107 2SA1602 TP-1EF
Q108 2SA1602 TP-1EF
D101 P6SMB39AT3
D102 P6SMB39AT3
D103 P6SMB39AT3
D201 P6SMB39AT3
D202 P6SMB39AT3
D203 P6SMB39AT3
D208 MA8027-H-TX
L121 10μH
L122 10μH
L123 10μH
L131 10μH
L132 10μH
L133 10μH
C191 2200 35V
C192 2200 35V
C193 2200 35V
TP376
TP377
TP378
TP379
TP380
TP381
TP382
TP383
TP384
TP385
TP386
CN307 4P EH-S 2.5MM
CN306 4P EH-S 2.5MM
REAR RCH+
REAR RCH−
REAR LCH+
REAR LCH−
FRONT RCH+
FRONT RCH−
FRONT LCH+
FRONT LCH−
L
SPK BOARD CN311 (Page 50)
M
SPK BOARD CN312 (Page 50)

5-25. PRINTED WIRING BOARD – SPK/LF SECTION –

- See page 21 for Circuit Boards Location.

LF :Uses unleaded solder.


1
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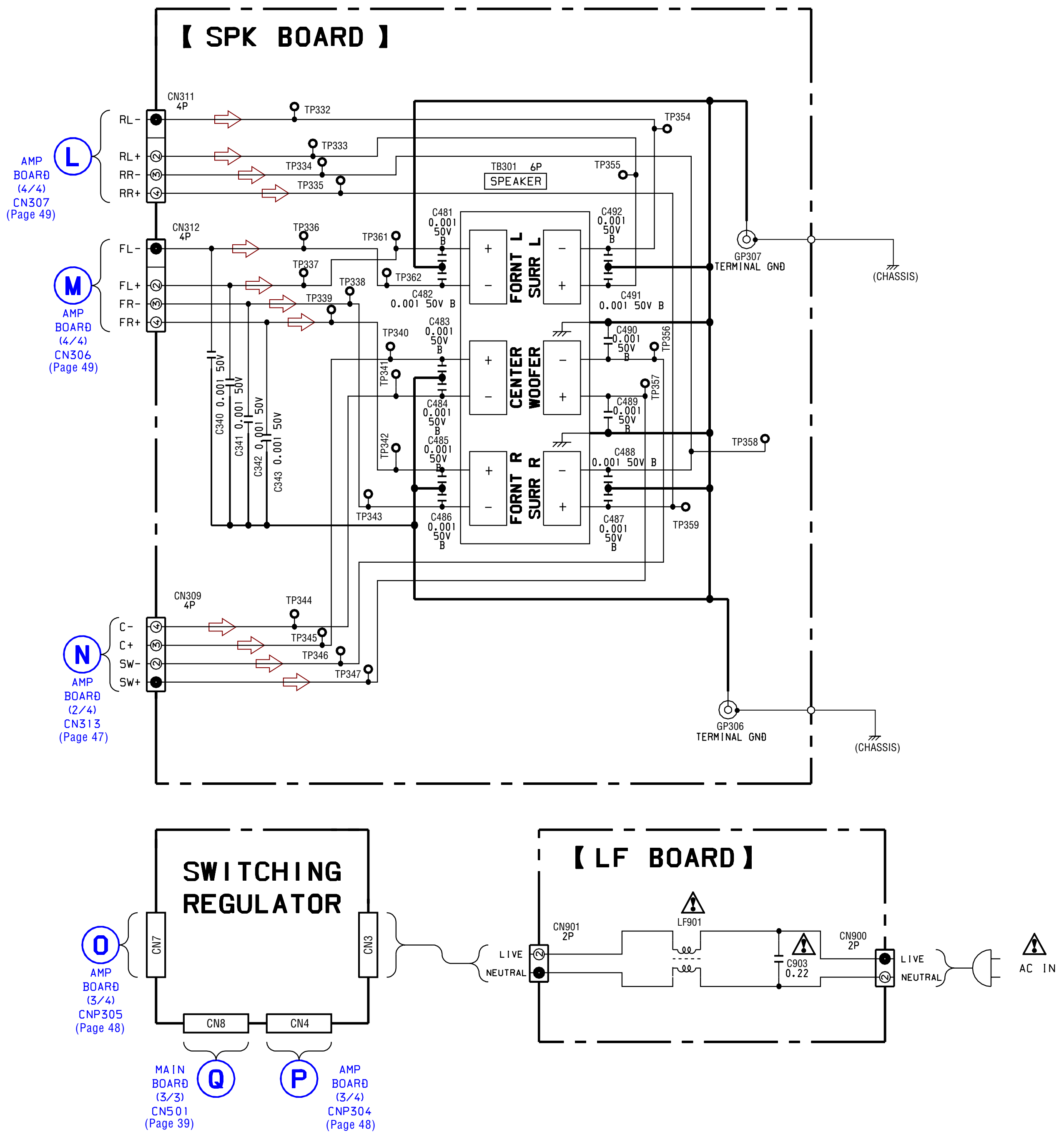
7
8
9
10
A
B
C
D
E
F
G
H
I
【SPK BOARD】(SIDE A)
1-861-748-
11
(11)
【SPK BOARD】(SIDE B)
TB301
SPEAKER
FRONT R
CENTER
FRONT L
SURR R
WOOFER
SURR L
(CHASSIS)
(CHASSIS)
GP307
GP306
C342
C343
C340
C341
CN311
CN312
CN309
1-861-748-
L
AMP BOARD CN307 (page 45)
M
AMP BOARD CN306 (page 45)
N
AMP BOARD CN313 (page 45)
【LF BOARD】
AC IN
B2
CN900
C903
LF901
CN901
1-861-264-
12
(12)
SWITCHING REGULATOR
CN 7
CN 3
CN 8
CN 4
O
AMP BOARD CNP305 (page 45)
Q
MAIN BOARD CN501 (page 35)
P
AMP BOARD CNP304 (page 45)

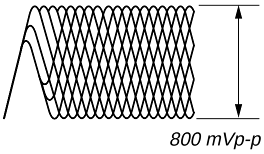
5-26. SCHEMATIC DIAGRAM – SPK/LF SECTION –


【SPK BOARD】
CN311 4P
RL−
RL+
RR−
RR+
L
AMP BOARD (4/4) CN307 (Page 49)
TP332
TP333
TP334
TP335
TP354
TP355
TB301 6P
SPEAKER
C481 0.001 50V B
C492 0.001 50V B
FORNT L
SURR L
CENTER
WOOFER
FORNT R
SURR R
GP307
TERMINAL GND
(CHASSIS)
CN312 4P
FL−
FL+
FR−
FR+
M
AMP BOARD (4/4) CN306 (Page 49)
TP336
TP337
TP338
TP339
TP361
TP362
C482 0.001 50V B
C491 0.001 50V B
C340 0.001 50V
C341 0.001 50V
C342 0.001 50V
C343 0.001 50V
TP340
TP341
TP342
TP343
C483 0.001 50V B
C490 0.001 50V B
TP356
TP357
C484 0.001 50V B
C489 0.001 50V B
C485 0.001 50V B
C488 0.001 50V B
TP358
C486 0.001 50V B
C487 0.001 50V B
TP359
CN309 4P
C−
C+
SW−
SW+
N
AMP BOARD (2/4) CN313 (Page 47)
TP344
TP345
TP346
TP347
GP306
TERMINAL GND
(CHASSIS)
SWITCHING REGULATOR
CN7
CN3
CN8
CN4
O
AMP BOARD (3/4) CNP305 (Page 48)
Q
MAIN BOARD (3/3) CN501 (Page 39)
P
AMP BOARD (3/4) CNP304 (Page 48)
【LF BOARD】
CN901 2P
LF901
CN900 2P
C903 0.22
LIVE
NEUTRAL
LIVE
NEUTRAL
AC IN

- **Waveforms**

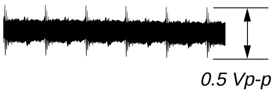
– DMB09 Board –

① IC102 (96) (DVDRFIP)



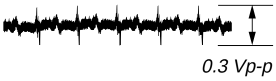
200 mV/DIV, 100 ns/DIV

② IC102 ㉑ (TEO)



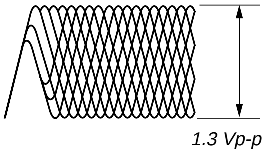
500 mV/DIV, 1 ms/DIV

③ IC102 ⑱ (FEO)



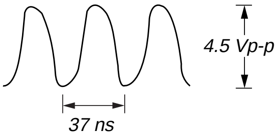
100 mV/DIV, 1 ms/DIV

④ IC102 ⑥ (RFOP)



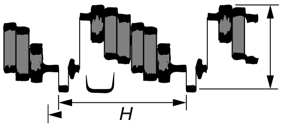
500 mV/DIV, 100 ns/DIV

⑤ IC201 (187) (XTALI)



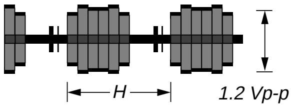
1 V/DIV, 10 ns/DIV

⑥ IC201 (168) (YUV3/CVBS)



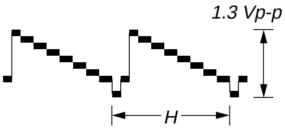
500 mV/DIV, 20 μs/DIV

⑦ IC201 (164) (YUV/C)



500 mV/DIV, 20 μs/DIV

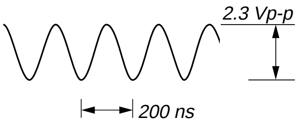
⑧ IC201 (166) (YUV2/Y)



500 mV/DIV, 20 μs/DIV

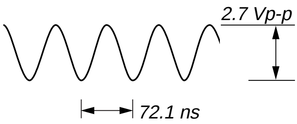
– MAIN Board –

⑨ IC509 ⑭ (X1)



1 V/DIV, 100 ns/DIV

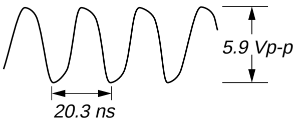
⑩ IC506 ⑨ (MCLKI)



1 V/DIV, 50 ns/DIV

– AMP Board –

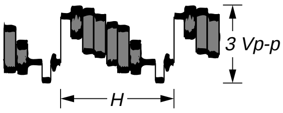
⑪ IC108 ㊽ (XFSOIN)



1 V/DIV, 10 ns/DIV

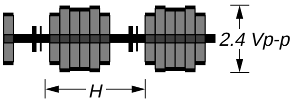
– IO Board –

⑫ IC201 ㉓ (CVBS OUT)



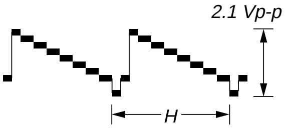
1 V/DIV, 20 μs/DIV

⑬ IC201 ㉖ (COUT)



1 V/DIV, 20 μs/DIV

⑭ IC201 ㉑ (YOUT)

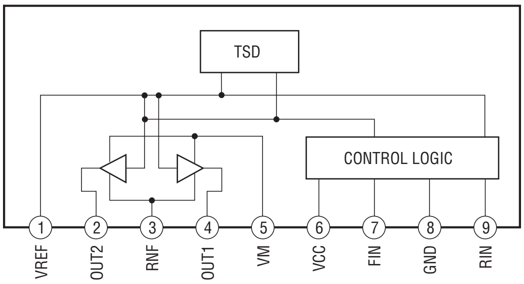


1 V/DIV, 20 μs/DIV

- **IC Block Diagrams**

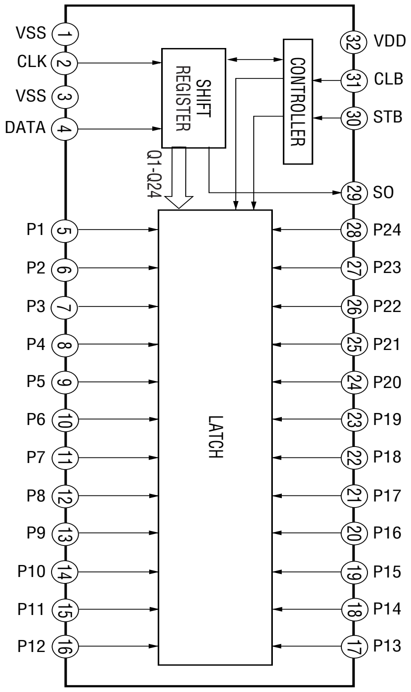
– TRANSLATION Board –

IC701, 711 BA6956AN


TSD
CONTROL LOGIC
1
2
3
4
5
6
7
8
9
VREF
OUT2
RNF
OUT1
VM
VCC
FIN
GND
RIN

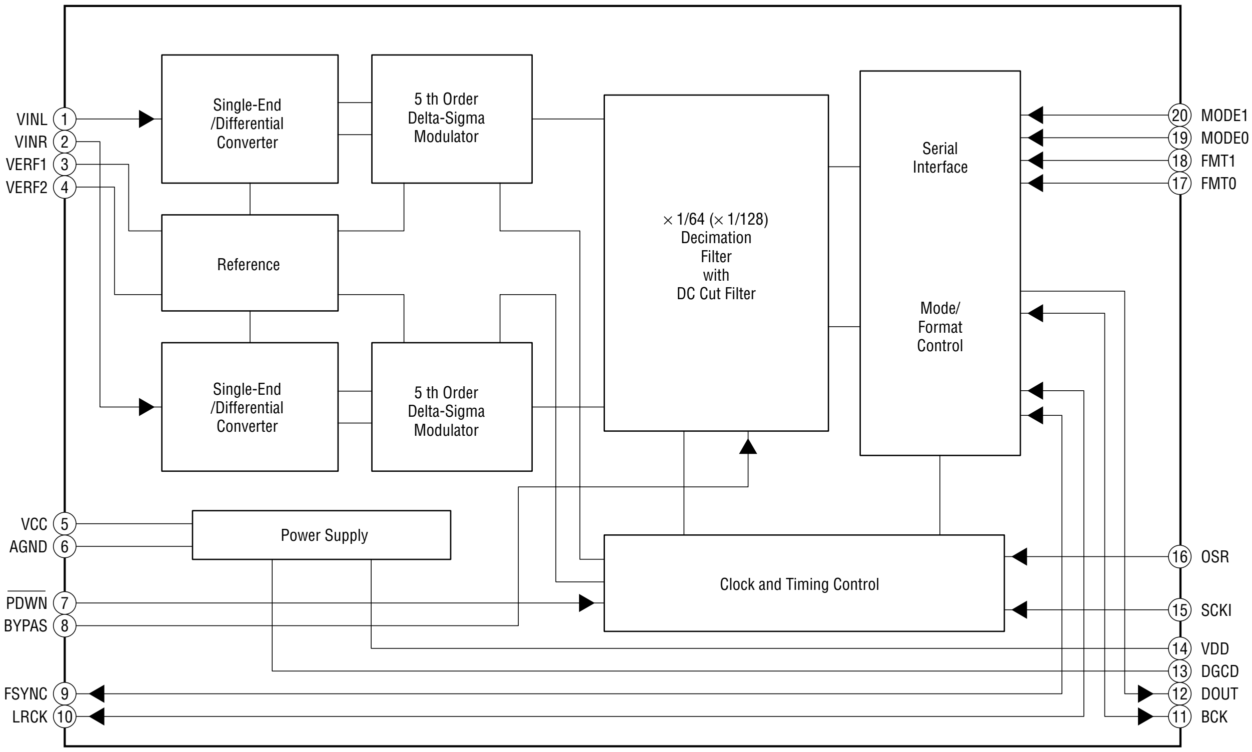
– PANEL Board –

IC802 BU2152FS

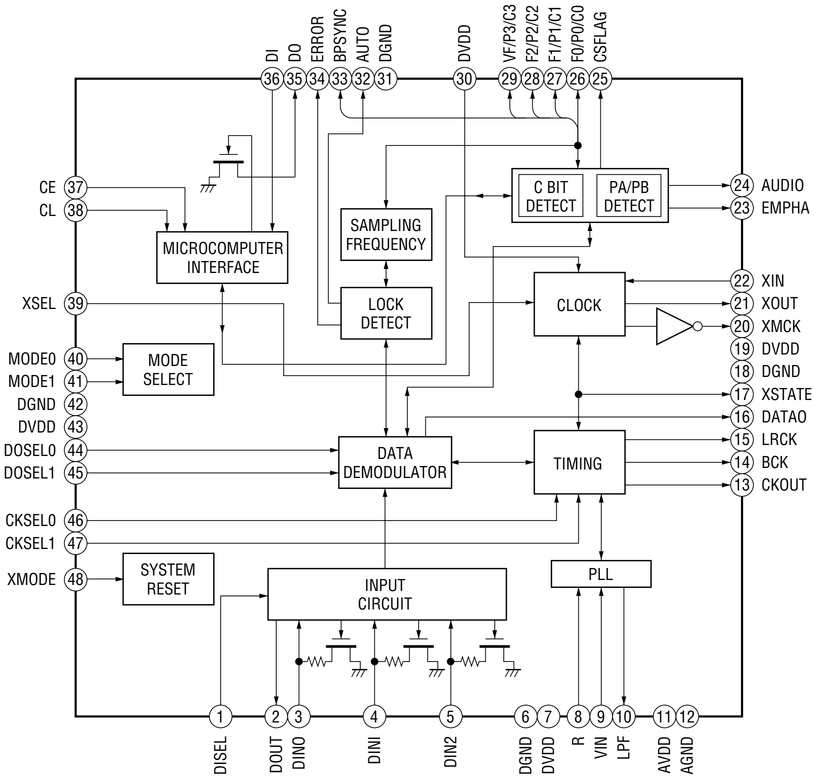

VSS 1
CLK 2
VSS 3
DATA 4
SHIFT REGISTER
CONTROLLER
Q1-Q24
LATCH
P1 5
P2 6
P3 7
P4 8
P5 9
P6 10
P7 11
P8 12
P9 13
P10 14
P11 15
P12 16
32 VDD
31 CLB
30 STB
29 SO
28 P24
27 P23
26 P22
25 P21
24 P20
23 P19
22 P18
21 P17
20 P16
19 P15
18 P14
17 P13

– MAIN Board –

IC501 PCM1802DBR

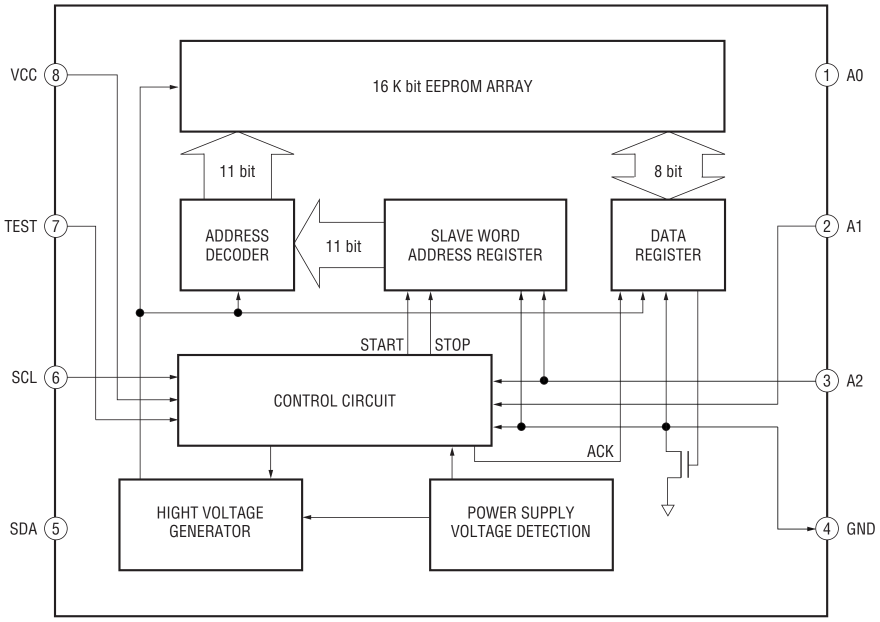

VINL 1
VINR 2
VERF1 3
VERF2 4
VCC 5
AGND 6
PDWN 7
BYPAS 8
FSYNC 9
LRCK 10
Single-End /Differential Converter
5 th Order Delta-Sigma Modulator
Reference
Single-End /Differential Converter
5 th Order Delta-Sigma Modulator
× 1/64 (× 1/128) Decimation Filter with DC Cut Filter
Serial Interface
Mode/ Format Control
Power Supply
Clock and Timing Control
20 MODE1
19 MODE0
18 FMT1
17 FMT0
16 OSR
15 SCKI
14 VDD
13 DGCD
12 DOUT
11 BCK

IC505 LC89056W-E


DI
DO
ERROR
BPSYNC
AUTO
DGND
DVDD
VF/P3/C3
F2/P2/C2
F1/P1/C1
F0/P0/C0
CSFLAG
36
35
34
33
32
31
30
29
28
27
26
25
CE 37
CL 38
XSEL 39
MODE0 40
MODE1 41
DGND 42
DVDD 43
DOSEL0 44
DOSEL1 45
CKSEL0 46
CKSEL1 47
XMODE 48
24 AUDIO
23 EMPHA
22 XIN
21 XOUT
20 XMCK
19 DVDD
18 DGND
17 XSTATE
16 DATAO
15 LRCK
14 BCK
13 CKOUT
MICROCOMPUTER INTERFACE
SAMPLING FREQUENCY
C BIT DETECT
PA/PB DETECT
LOCK DETECT
CLOCK
MODE SELECT
DATA DEMODULATOR
TIMING
SYSTEM RESET
INPUT CIRCUIT
PLL
1
2
3
4
5
6
7
8
9
10
11
12
DISEL
DOUT
DINO
DIN1
DIN2
DGND
DVDD
R
VIN
LPF
AVDD
AGND

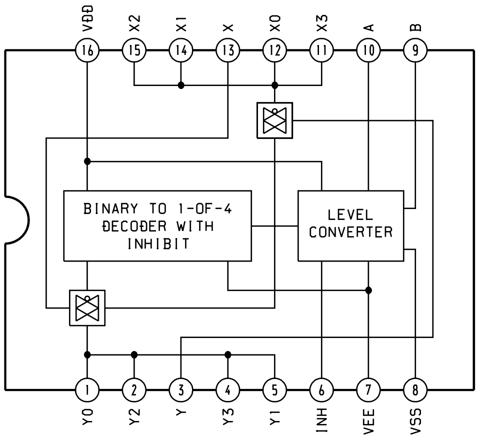
– DMB09 Board –

IC205 BR24L16F-WE2

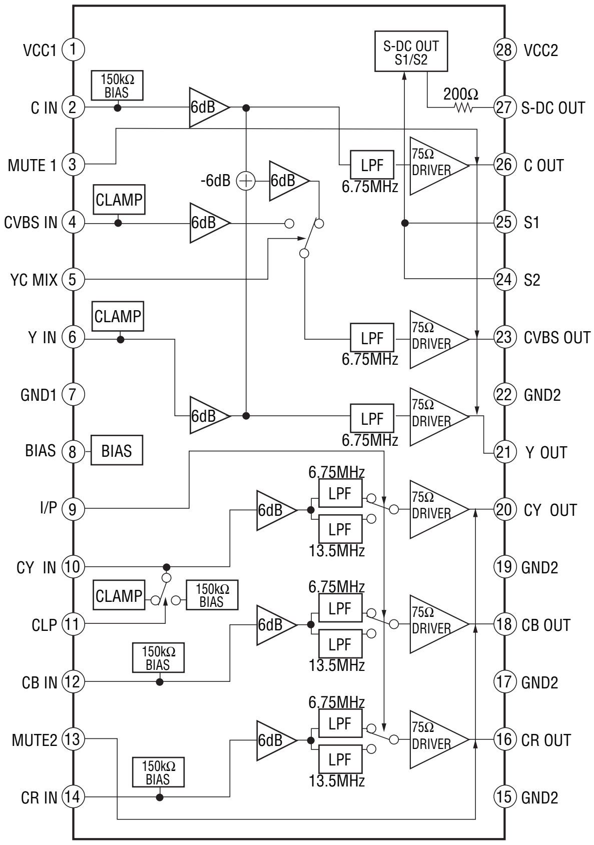

VCC 8
TEST 7
SCL 6
SDA 5
1 A0
2 A1
3 A2
4 GND
16 K bit EEPROM ARRAY
11 bit
8 bit
ADDRESS DECODER
11 bit
SLAVE WORD ADDRESS REGISTER
DATA REGISTER
START
STOP
CONTROL CIRCUIT
ACK
HIGHT VOLTAGE GENERATOR
POWER SUPPLY VOLTAGE DETECTION

– IO Board –

IC200 MC14052BDR2

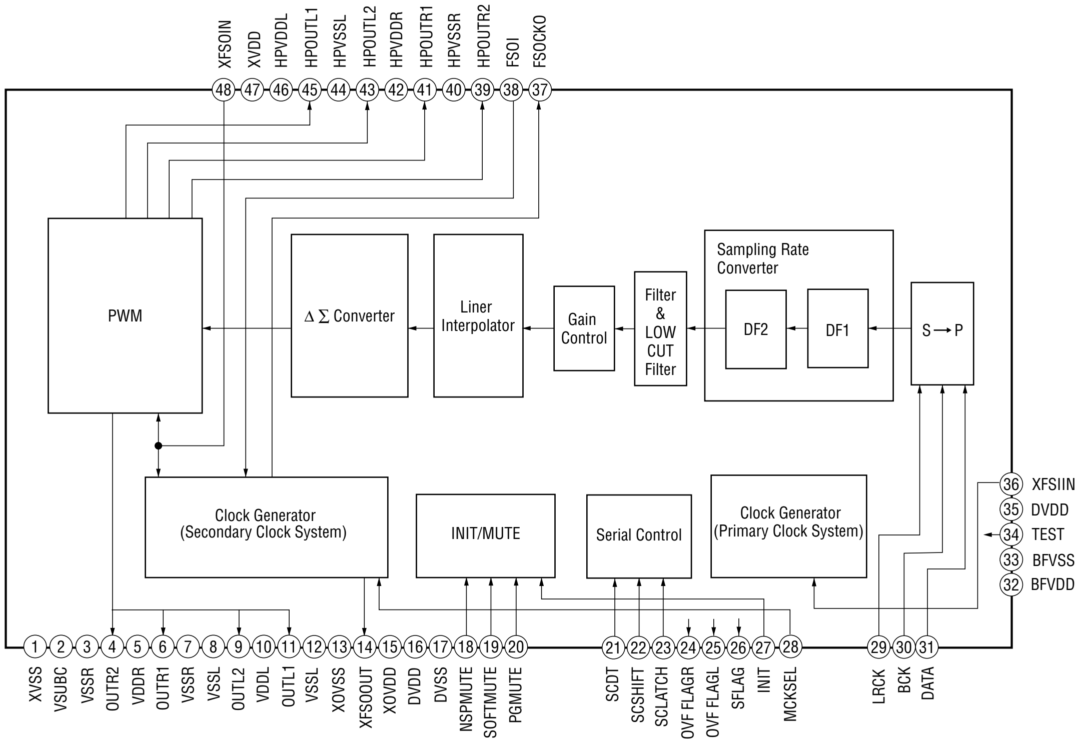

VDD
X2
X1
X
X0
X3
A
B
16
15
14
13
12
11
10
9
BINARY TO 1-OF-4 DECODER WITH INHIBIT
LEVEL CONVERTER
1
2
3
4
5
6
7
8
Y0
Y2
Y
Y3
Y1
INH
VEE
VSS

IC201 MM1623BFBE


VCC1 1
C IN 2
MUTE 1 3
CVBS IN 4
YC MIX 5
Y IN 6
GND1 7
BIAS 8
I/P 9
CY IN 10
CLP 11
CB IN 12
MUTE2 13
CR IN 14
28 VCC2
27 S-DC OUT
26 C OUT
25 S1
24 S2
23 CVBS OUT
22 GND2
21 Y OUT
20 CY OUT
19 GND2
18 CB OUT
17 GND2
16 CR OUT
15 GND2
S-DC OUT S1/S2
200Ω
150kΩ BIAS
6dB
-6dB
CLAMP
LPF
6.75MHz
75Ω DRIVER
BIAS
13.5MHz

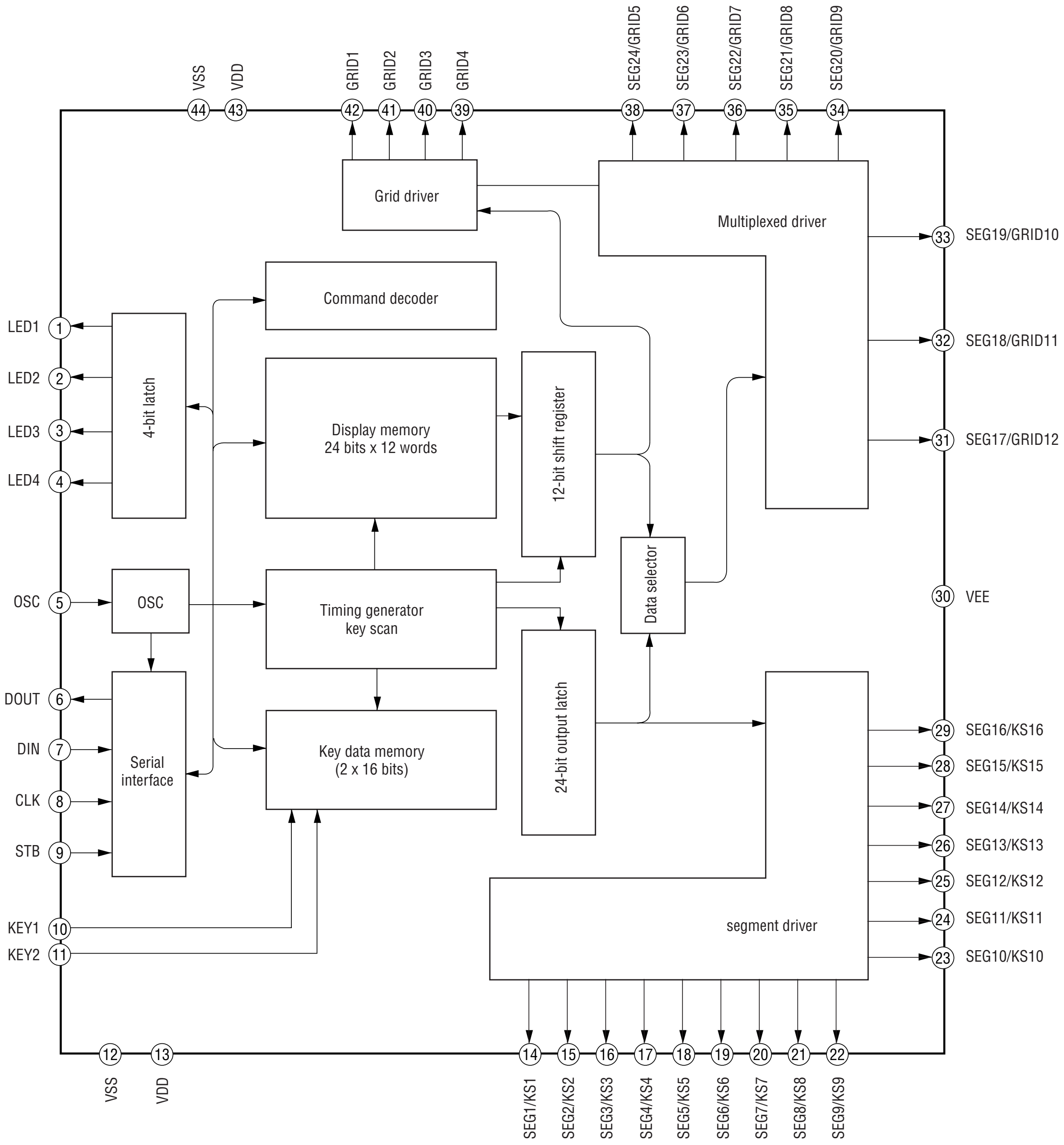
– AMP Board –

IC108, 109, 110 CXD9788AR


XFSOIN
XVDD
HPVDDL
HPOUTL1
HPVSSL
HPOUTL2
HPVDDR
HPOUTR1
HPVSSR
HPOUTR2
FSOI
FSOCKO
48
47
46
45
44
43
42
41
40
39
38
37
PWM
Δ Σ Converter
Liner Interpolator
Gain Control
Filter & LOW CUT Filter
Sampling Rate Converter
DF2
DF1
S→P
Clock Generator (Secondary Clock System)
INIT/MUTE
Serial Control
Clock Generator (Primary Clock System)
36 XFSIIN
35 DVDD
34 TEST
33 BFVSS
32 BFVDD
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
XVSS
VSUBC
VSSR
OUTR2
VDDR
OUTR1
VSSR
VSSL
OUTL2
VDDL
OUTL1
VSSL
XOVSS
XFSOOUT
XOVDD
DVDD
DVSS
NSPMUTE
SOFTMUTE
PGMUTE
SCDT
SCSHIFT
SCLATCH
OVF FLAGR
OVF FLAGL
SFLAG
INIT
MCKSEL
LRCK
BCK
DATA

– FL Board –

IC803 PT6315


VSS
VDD
GRID1
GRID2
GRID3
GRID4
SEG24/GRID5
SEG23/GRID6
SEG22/GRID7
SEG21/GRID8
SEG20/GRID9
44
43
42
41
40
39
38
37
36
35
34
Grid driver
Multiplexed driver
Command decoder
Display memory
24 bits x 12 words
12-bit shift register
4-bit latch
Data selector
OSC
Timing generator
key scan
24-bit output latch
Serial
interface
Key data memory
(2 x 16 bits)
segment driver
LED1
1
LED2
2
LED3
3
LED4
4
OSC
5
DOUT
6
DIN
7
CLK
8
STB
9
KEY1
10
KEY2
11
33
SEG19/GRID10
32
SEG18/GRID11
31
SEG17/GRID12
30
VEE
29
SEG16/KS16
28
SEG15/KS15
27
SEG14/KS14
26
SEG13/KS13
25
SEG12/KS12
24
SEG11/KS11
23
SEG10/KS10
12
13
VSS
VDD
14
15
16
17
18
19
20
21
22
SEG1/KS1
SEG2/KS2
SEG3/KS3
SEG4/KS4
SEG5/KS5
SEG6/KS6
SEG7/KS7
SEG8/KS8
SEG9/KS9

• IC Pin Function Description

• DMB09 BOARD IC102 CXD9780R (CD/DVD/RF AMP, FOCUS/TRACKING ERROR AMP)

Pin No.	Pin Name	I/O	Description
1	WOBS0	O	Wobble signal output (Not used)
2	WVDD	—	Wobble power
3	AGNDX	—	Grund
4	AGNDX	—	Grund
5	AVDD0	—	Power for RF output
6	RFOP	O	RF positive output
7	RFON	O	RF negative output
8	AGNDO	—	Grund for RF output
9	TM1	I	Trimming pin for ALPC1 (Not used)
10	TM2	I	Trimming pin for ALPC1 (Not used)
11	TM3	I	Trimming pin for ALPC2 (Not used)
12	AGNDT	—	Grund for Trimming PAD
13	TM4	I	Trimming pin for ALPC2 (Not used)
14	AVDDT	—	Power for Trimming PAD
15	V2REFO	O	Reference voltage 2.8V
16	VREFO	O	Reference voltage 1.4V
17	V20	O	Reference voltage 2.0V
18	FEO	O	Focusing erro output
19	LVL	O	RF level output
20	CS0	O	Center servo signal output
21	TEO	O	Tracking error output
22	VDDP	—	Power for PAD
23	DEFECT	O	Flag of bad data output status
24	LRFRP	O	Low frequency RF ripple output
25	HRFRP	O	High frequency RF ripple output
26	CRTP	—	RF top envelop filter capacitor connecting
27	CRTPLP	—	Defect level filter capacitor connecting (Not used)
28	TRLPA	—	Low -pass filter capacitor connecting (Not used)
29	TRLP	—	Low -pass filter capacitor connecting
30	HTRC	O	high speed track counting digital output
31	GNDP	—	Grund for PAD
32	DPFN	—	Not used
33	DPFO	—	DPD amplifier output (Not used)
34	AGNDX	—	Ground
35	AGNDX	—	Ground (Not used)
36	AGNDX	—	Ground (Not used)
37	VDD	—	Serial I/O power
38	VFO013	I	DVD-RAM Header signal
39	GND	—	Serial I/O grund
40	UDGATE	I	Control signal for DVD-RAM
41	HDGATE	I	Control signal for DVD-RAM
42	IO0	I/O	General purpose input/output
43	IO1	I/O	General purpose input/output (Not used)
44	IO2	I/O	General purpose input/output
45	IO3	I/O	General purpose input/output
46	IO4	I/O	General purpose input/output
47	IO5	I/O	General purpose input/output

Pin No.	Pin Name	I/O	Description
48	IO6	I/O	General purpose input/output
49	IO7	I/O	General purpose input/output
50	IO8	I/O	General purpose input/output
51	IO9	I/O	General purpose input/output
52	IOA	I/O	General purpose input/output
53	IOB	I/O	General purpose input/output (Not used)
54	VDDS	—	Serial I/O power
55	XCK16M	I	16.9MHz for verification (Not used)
56	SCLK	I	RF serial clock input
57	GNDS	—	Serial I/O grund
58	SDEN	I	RF serial data enable
59	SDATA	I/O	RF serial data IO
60	RST	I	Reset (active high)
61	OPDMUTE	I	DPD mute control input
62	AGNDP	—	DPD and Peak-Detection ground
63	AGNDX	—	Grund
64	AVDDP	—	DPD and Peak-Detection power
65	AGNDF	—	DPD and Peak-Detection ground
66	VCON	O	Not used
67	AVDDF	—	DPD and Peak-Detection power
68	AGNDX	—	Grund
69	AVDDM	—	DPD power
70	COSPHI	O	Amplifier output for hall sensor signal (Not used)
71	HALLCOS	I	Negative input of amplifier for hall sensor signal (Not used)
72	REFCOS	I	Positive input of amplifier for hall sensor signal (Not used)
73	AGNDM	—	DPD ground
74	HALLSIN	I	Negative input of amplifier for hall sensor signal (Not used)
75	REFSIN	I	Positive input of amplifier for hall sensor signal (Not used)
76	SINPHI	O	Amplifier output for hall sensor signal (Not used)
77	SWO	O	Output from mux of SW1 & SW2
78	SW2	I	External input for servo input select
79	SW1	I	External input for servo input select
80	MOP	O	Not used
81	MON	O	Not used
82	AGNDX	—	Grund
83	AGNDX	—	Grund
84	CEON	—	RF offset cancellation capacitor connecting
85	CEOP	—	RF offset cancellation capacitor connecting
86	OSN	—	RF AGC loop capacitor connecting for DVD-ROM (Not used)
87	REGCU	—	RF AGC loop capacitor connecting for DVD-ROM (Not used)
88	RFFGC	—	RF AGC loop capacitor connecting for DVD-ROM
89	OSP	—	RF offset cancellation capacitor connecting
90	OSN	—	RF offset cancellation capacitor connecting
91	CDD	I	AC coupled CD RF signal inpurt D (Not used)
92	CDC	I	AC coupled CD RF signal inpurt C (Not used)
93	CDB	I	AC coupled CD RF signal inpurt B (Not used)
94	CDA	I	AC coupled CD RF signal inpurt A (Not used)

Pin No.	Pin Name	I/O	Description
95	DVDRFIN	I	AC coupled DVD RF signal inpurt RFIN (Not used)
96	DVDRFIP	I	AC coupled DVD RF signal inpurt RFIP
97	DVDD	I	AC coupled DVD RF signal inpurt D
98	DVDC	I	AC coupled DVD RF signal inpurt C
99	DVDB	I	AC coupled DVD RF signal inpurt B
100	DVDA	I	AC coupled DVD RF signal inpurt A
101	MA	I	AC coupled DVD-RAM main-beam RFsignal inpurt A
102	MB	I	AC coupled DVD-RAM main-beam RFsignal inpurt B
103	MC	I	AC coupled DVD-RAM main-beam RFsignal inpurt C
104	MD	I	AC coupled DVD-RAM main-beam RFsignal inpurt D
105	SA	I	AC coupled DVD-RAM sub-beam RFsignal inpurt A
106	SB	I	AC coupled DVD-RAM sub-beam RFsignal inpurt B
107	AGND	—	VGA and equalizer ground
108	IR	—	EXternal current bias resistor (R=15k)
109	AVDO	—	VGA and equalizer power
110	SC	I	AC coupled DVD-RAM sub-beam RFsignal inpurt C
111	SD	I	AC coupled DVD-RAM sub-beam RFsignal inpurt D
112	CDFDP	I	CD focusing error positive input (Not used)
113	CDFDN	I	CD focusing error positive input (Not used)
114	SVDO	—	Servo power
115	TPI	I	3 beam satellite PD signal negative input (Not used)
116	TNI	I	3 beam satellite PD signal negative input (Not used)
117	SGND	—	Servo ground
118	WGAND	—	Wobble ground
119	AGC1	—	Wobble AGC loop capacitor
120	WAVDO	—	Wobble power
121	AGC2	—	Wobble AGC loop capacitor (Not used)
122	AGC3	—	Wobble AGC loop capacitor (Not used)
123	MDI2	I	Laser power monitor input
124	MDI1	I	Laser power monitor input
125	LD01	O	Laser driver output
126	LDO2	O	Laser driver output
127	RFSUBO	O	Header push-pull RF output signal
128	WGND	—	Wobble ground

• **DMB09 BOARD IC201 CXD9781R (DVD SYSTEM PROCESSOR, DVD DECODER, DIGITAL SERVO PROCESSOR)**

Pin No.	Pin Name	I/O	Description
1	IREF	I	Current reference input
2	PLLVSS	—	Terminal Ground
3	LPIOP	O	Positive output of the low pass filter
4	LOION	O	Nagative output of the low pass filter
5	LPFON	O	Nagative output of loop filter amplifier
6	LPFIP	I	Positive input of loop filter amplifier
7	LPFIN	I	Nagative input of loop filter amplifier
8	LPFOP	O	Positive output of loop filter amplifier
9	JITFO	O	RF jitter neter output
10	JITFN	I	Nagative input of operation amplifier for RF jigger meter
11	PLLVDD3	—	Power Supply (+3.3V)
12	FOO	O	FR signal output to Motor Driver (IC101)
13	TRD	O	TR signal output to Motor Driver (IC101)
14	TROPREOWM	O	TROPREOWM signal output to Motor Driver (IC101)
15	PWMOUT1	—	Not used
16	PWMOUT2	O	PWMUTE signal output to Motor Driver (IC102)
17	DVDD2	—	Power Supply (+2.5V)
18	DMD	O	DM signal output to Motor Driver (IC101)
19	FMD	O	FM signal output to Motor Driver (IC101)
20	DVSS	—	Terminal Ground
21	FG	—	Not used
22 to 27	HIGHA0 to 5	O	Address bus 8-13 output to PROM (IC204)
28	DVSS	—	Terminal Ground
29 to 30	HIGHA6 to 7	O	Address bus 14-15 output to PROM (IC204)
31 to 34	AD7 to 4	I	Data bus 7-4 input from PROM (IC204)
35	DVDD3	—	Power Supply (+3.3V)
36 to 39	AD3 to 0	I	Data bus 3-0 input from PROM (IC204)
40 to 41	IOA0 to 1	O	Address bus 0-1 output to PROM (IC204)
42	DVDD2	—	Power Supply (+2.5V)
43 to 48	IOA2 to 7	O	Address bus 2-7 output to PROM (IC204)
49 to 50	A16 to 17	O	Address bus 16-17 output to PROM (IC204)
51 to 53	IOA18 to 20	O	Address bus 18-20 output to PROM (IC204)
54	APLLVSS	—	Terminal Ground
55	APLLVDD	—	Power Supply (+3.3V)
56	ALE	—	Address bus latch enable (Not used)
57	IOOE	O	OE signal output to PROM (IC204)
58	IOWA	O	WE signal output to PROM (IC204)
59	IOCS	O	CE signal output to PROM (IC204)
60	VDSS	—	Terminal Ground
61	UP12	O	VIFBUSY signal output to SYSTEM CONTROLLER (IC509)
62	UP13	O	DVD SCO signal output to SYSTEM CONTROLLER (IC509)
63	UP14	I	DVD SOD signal input from SYSTEM CONTROLLER (IC509)
64	UP15	I	DVD XIFCS signal input from SYSTEM CONTROLLER (IC509)
65	UP16	O	SCL signal output to EEPROM (IC205)
66	DVDD3	—	Power Supply (+3.3V)
67	UP16	O	SDA signal output to EEPROM (IC205)
68	UP30	I	V2P8 signal input from RF AMP (IC102)

Pin No.	Pin Name	I/O	Description
69	UP31	O	DVD SIO signal output to SYSTEM CONTROLLER (IC509)
70	INTO	I	Interrupt0
71	IR	I	IR control signal input
72	DVDD2	—	Power Supply (+2.5V)
73	UP34	O	RXD output signal
74	UP35	O	TXD output signal
75	UWA	I	Write storobe
76	URO	I	Read storobe
77	DVSS	—	Terminal Ground
78 to 81	RD7 to 4	I	Data bus 7-4 from SD-RAM (IC206)
82	DVDD2	—	Power Supply (+2.5V)
83 to 86	RD3 to 0	O	Data bus 3-0 from SD-RAM (IC206)
87	AWE	O	WE signal output to SD-RAM (IC206)
88	CAS	O	CAS signal output to SD-RAM (IC206)
89	RAS	O	RAS signal output to SD-RAM (IC206)
90	RCS	O	RCS signal output to SD-RAM (IC206)
91	BAO	O	BAO signal output to SD-RAM (IC206)
92	DVSS	—	Terminal Ground
93 to 96	RD15 to 12	I/O	Data bus 15-12 from SD-RAM (IC206)
97	DVDD3	—	Power Supply (+3.3V)
98 to 101	RD11 to 8	I/O	Data bus 11-8 from SD-RAM (IC206)
102	DVSS	—	Terminal Ground
103	CLK	O	CLK signal output to SD-RAM (IC206)
104	CLE	O	CLE signal output to SD-RAM (IC206)
105 to 107	RA11,10,8	O	Address bus 11,10,8 output to SD-RAM (IC206)
108	DMVDD3	—	Power Supply (+3.3V)
109	DMVSS	—	Terminal Ground
110	RA7	O	Address bus 7 output to SD-RAM (IC206)
111	DMVDD3	—	Power Supply (+3.3V)
102 to 114	RA6 to 4	O	Address bus 6-4 output to SD-RAM (IC206)
115	VDSS	—	Terminal Ground
116	DQM1	O	DQM1 signal output to SD-RAM (IC206)
117	DQM0	O	DQM2 signal output to SD-RAM (IC206)
118	BA1	O	BA1 signal output to SD-RAM (IC206)
119	RA10	O	Address bus 10 output to SD-RAM (IC206)
120	DVDD2	—	Power Supply (+2.5V)
121 to 124	RA0 to 3	O	Address bus 0-3 output to SD-RAM (IC206)
125	VDSS	—	Terminal Ground
126 to 129	RD31 to 28	—	Not used (open)
130	DVSS	—	Terminal Ground
131 to 134	RD27 to 24	—	Not used (open)
135	DVSS	—	Terminal Ground
136,137	DQM3,2	—	Not used (open)
138	RD23	—	Not used (open)
139	RD22	I	DRAM data input
140	DVDD2	—	Power Supply (+2.5V)
141	RD21	I	DRAM data input

Pin No.	Pin Name	I/O	Description
142	RD20	I	DRAM data input
143	RD19	I	DISCEXT signal
144	RD18	—	Not used (open)
145	DVSS	—	Terminal Ground
146	RD17	I	DRAM data input
147	RD16	I	DRAM data input
148	ABCK	O	Audio bit clock (Not used)
149	ALRCK	I	Audio left/right channnel clock (Not used)
150	DVDD3	—	Power Supply (+3.3V)
151	ACLK	I	Audio DAC master clock (Not used)
152	MC-DATA	I	Microphone serial input (Not used)
153	SPDIF	O	SPDIF output
154	ASDATA0	I	Auio serial data (Not used)
155	ASDATA1	I	Auio serial data (Not used)
156	ASDATA2	I	Auio serial data (Not used)
157	ASDATA3	I	Auio serial data (Not used)
158	ASDATA4	I	Auio serial data (Not used)
159	BACVDDC	—	3.3V power pin for VIDEO DAC circuitry
160	VREF	I	Bandgap referrence voltage (Not used)
161	FS	O	Full scale adjustment
162	YUV/CIN	O	Video data output bit0/Compensation capacitor (Not used)
163	DACVSSC	—	Terminal Ground
164	YUV/C	O	CHROMA signal output to VIDEO AMP (IC201)
165	DACVDDB	—	Power Supply (+3.3V)
166	YUV2/Y	O	Y signal output to VIDEO AMP (IC201)
167	DACVSSB	O	Terminal Ground
168	YU3/CVBS	O	VIDEO signal output to VIDEO AMP (IC201)
169	DACVDDA	—	Power Supply (+3.3V)
170	YUV4/G	O	G signal output to VIDEO AMP (IC201)
171	DACVSSA	—	Terminal Ground
172	YUV5/B	O	B signal output to VIDEO AMP (IC201)
173	YUV6/R	O	R signal output to VIDEO AMP (IC201)
174	IEC	I	Microcontroller ICE mode enable (Not used)
175	BKANK	I/O	Video blank area,active low
176	VSYN	I/O	Vertical sync (Not used)
177	YUV7	I/O	Video data output (Not used)
178	DVSS	—	Terminal Ground
179	HSYN	I/O	Horizontal sync (Not used)
180	SPMCLK	I	Audio DAC master clock of SPDIF input (Not used)
181	SPDATA	I	IPSEL signal input from SYSTEM CONTROLLER (IC509)
182	DVDD2	—	Power Supply (+2.5V)
183	SPLRCK	I	Audio left/right channnel clock of SPDIF input (Not used)
184	SPBCK	I	Not used (open)
185	DVDD3	—	Power Supply (+3.3V)
186	XTALO	O	Oscillator output signal
187	XTALI	I	Oscillator input signal
188	PRST	I	MTRST signal input from SYSTEM CONTROLLER (IC509)

Pin No.	Pin Name	I/O	Description
189	DVSS	—	Terminal Ground
190	VFO13	O	Not used (open)
191	IDGATE	O	Not used (open)
192	DVDD3	—	Power Supply (+3.3V)
193	UPGATE	O	Not used (open)
194	WOBSI	O	Not used (open)
195	SDATA	I	DATA RF signal input from RF AMP (IC102)
196	SDEN	O	SDEN signal output to RF AMP (IC102)
197	SLCK	O	CLK RF signal output to RF AMP (IC102)
198	BDO	I	BOO signal input from RF AMP (IC102)
199	ADCVSS	—	Terminal Ground
200	ADIN	I	ADIN signal input from RF AMP (IC102)
201	RFSUBI	I	Not used (open)
202	TEZISLV	I	Tracking error zero crossing low pass input
203	TEI	I	TE signal input from RF AMP (IC102)
204	CSO	I	CSO signal input from RF AMP (IC102)
205	FEI	I	FE signal input from RF AMP (IC102)
206	RFLEVEL	I	PI signal input from RF AMP (IC102)
207	RFAPDC	I	RFRP signal input from RF AMP (IC102)
208	RFAPAC	I	RFRP signal input from RF AMP (IC102)
209	HRFZC	I	RFZC signal input from RF AMP (IC102)
210	PWMVREF	I	VIP4 signal input from RF AMP (IC102)
211	PWM2VREF	I	V2P8 signal input from RF AMP (IC102)
212	ADCVDD3	—	Power Supply (+3.3V)
213	RFOTSLVP	O	Not used (open)
214	RFOTSLVN	O	Not used (open)
215	RFIN	I	RFIN signal input from RF AMP (IC102)
216	RFIP	I	RFIP signal input from RF AMP (IC102)

• MAIN BOARD IC506 CXD9720BQ (DIGITAL AUDIO PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	VSS	—	Ground terminal
2	XRST	I	System reset signal input from the system controller “L”: reset
3	EXTIN	I	Master clock signal input terminal Not used
4	LRCKI3	I	L/R sampling clock signal input terminal Not used
5	VDDI	—	Power supply terminal (+2.6V)
6	BCKI3	I	Bit clock signal input terminal Not used
7	PLOCK	O	Internal PLL lock signal output terminal Not used
8	VSS	—	Ground terminal
9	MCLK1	I	System clock input terminal (13.9 MHz)
10	VDDI	—	Power supply terminal (+2.6V)
11	VSS	—	Ground terminal
12	MCLK2	O	System clock output terminal (13.9 MHz)
13	MS	I	Master/slave setting terminal “L”: internal clock, “H”: external clock Fixed at “L” in this set
14	SCKOUT	O	Internal system clock output to the D/A converter
15	LRCKI1	I	L/R sampling clock signal input from the digital audio interface receiver
16	VDDE	—	Power supply terminal (+3.3V)
17	BCKI1	I	Bit clock signal input from the digital audio interface receiver
18	SDI1	I	Audio serial data input from the A/D converter
19	LRCKO	O	L/R sampling clock signal output to the D/A converter
20	BCKO	O	Bit clock signal output to the D/A converter
21	VSS	—	Ground terminal
22	KFSIO	I	Audio clock signal input from the digital audio interface receiver
23 to 25	SDO1 to SDO3	O	Audio serial data output to the D/A converter
26	SDO4	O	Audio serial data output terminal Not used
27	SPDIF	O	SPDIF signal output terminal Not used
28	LRCKI2	I	L/R sampling clock signal input from the digital audio interface receiver
29	BCKI2	I	Bit clock signal input from the digital audio interface receiver
30	SDI2	I	Audio serial data input from the digital audio interface receiver
31	VSS	—	Ground terminal
32	HACN	O	Acknowledge signal output to the system controller
33	HDIN	I	Serial data input from the system controller
34	HCLK	I	Serial data transfer clock signal input from the system controller
35	HDOUT	O	Serial data output to the system controller
36	HCS	I	Chip select input from the system controller
37	GP12	I	Write signal input from the system controller
38	GP13	O	SD-RAM chip enable output terminal Not used
39	GP14	O	Row address strobe signal output terminal Not used
40	VDDI	—	Power supply terminal (+2.6V)
41	VSS	—	Ground terminal
42	GP15	O	Column address strobe signal output terminal Not used
43	OE0	O	Output terminal of data input/output mask Not used
44	CS0	O	Chip select signal output to the S-RAM
45	WE0	O	Write enable signal output to the S-RAM
46	VDDE	—	Power supply terminal (+3.3V)
47	WMD1	I	External memory wait mode setting terminal Fixed at “H” in this set
48	VSS	—	Ground terminal

Pin No.	Pin Name	I/O	Description
49	WMD0	I	External memory wait mode setting terminal Fixed at “H” in this set
50	PAGE2	O	External memory page selection signal output terminal Not used
51	VSS	—	Ground terminal
52, 53	PAGE1, PAGE0	O	External memory page selection signal output terminal Not used
54	BOOT	I	Boot mode control signal input terminal Not used
55	TST1	O	Not used
56	BST	I	Boot strap signal input from the system controller
57	MOD1	I	Operation mode setting terminal “L”: enhanced mode, “H”: normal mode Fixed at “H” in this set
58	MOD0	I	Operation mode setting terminal “L”: single chip mode, “H”: can not use Fixed at “L” in this set
59	EXLOCK	I	PLL lock error signal and data error flag input from the digital audio interface receiver
60	VDDI	—	Power supply terminal (+2.6V)
61	VSS	—	Ground terminal
62, 63	A17, A16	O	Address signal output terminal Not used
64 to 66	A15 to A13	O	Address signal output to the S-RAM
67	GP10	I	L/R sampling clock signal input terminal
68	GP9	O	Read ready signal output to the system controller
69	GP8	I	Channel status bit 1 input from the digital audio interface receiver
70	VDDI	—	Power supply terminal (+2.6V)
71	VSS	—	Ground terminal
72 to 75	D15 to D12	I/O	Two-way data bus with the S-RAM
76	VDDE	—	Power supply terminal (+3.3V)
77to 80	D11 to D8	I/O	Two-way data bus with the S-RAM
81	VSS	—	Ground terminal
82 to 85	A9, A12 to A10	O	Address signal output to the S-RAM
86	TDO	O	Simplicity emulation data output terminal Not used
87	TMS	I	Simplicity emulation data input start and end terminal Not used
88	XTRST	I	Simplicity emulation non-sync break signal input terminal Not used
89	TCK	I	Simplicity emulation clock signal input terminal Not used
90	TDI	I	Simplicity emulation data input terminal Not used
91	VSS	—	Ground terminal
92 to 97	A8 to A3	O	Address signal output to the S-RAM
98, 99	D7, D6	I/O	Two-way data bus with the S-RAM
100	VDDI	—	Power supply terminal (+2.6V)
101	VSS	—	Ground terminal
102 to 105	D5 to D2	I/O	Two-way data bus with the S-RAM
106	VDDE	—	Power supply terminal (+3.3V)
107, 108	D1, D0	I/O	Two-way data bus with the S-RAM
109, 110	A2, A1	O	Address signal output to the S-RAM
111	VSS	—	Ground terminal
112	A0	O	Address signal output to the S-RAM
113	PM	I	PLL initialize signal input from the system controller
114, 115	SDI3, SDI4	I	Audio serial data input terminal Not used
116	SYNC	I	Sync/non-sync setting terminal “L”: sync, “H”: non-sync Fixed at “H” in this set
117	TST2	I	Not used

Pin No.	Pin Name	I/O	Description
118	GP11	I	Not used
119	TST3	I	Not used
120	VDDI	—	Power supply terminal (+2.6V)

• MAIN BOARD IC509 uPD703261YGF-S07-JBT-A (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	IP SEL	O	Interless/Progressive
2	MTRST	O	Mediatech DVD uCOM reset
3	AVREF0	—	Analog reference voltage for A/D converter
4	AVSS	—	Analog ground
5	V CONTROL	O	Voltage control for amp
6	AC_ON/OFF	O	Control Relay for power tracnsformer
7	AVREF1	—	Analog reference voltage for D/A converter
8	DVD XIFCS	I	Media tech chip select
9	XIFBUSY	O	Media tech busy
10	FLASH0	I	Flash programing mode (pull down)
11	VDD	—	Power supply
12	REGC	—	Regulator control-connect 4.7uF
13	VSS	—	Ground
14	X1	I	Crystal input for main cock
15	X2	—	Crystal output for main clock
16	RESET	I	System reset signal input
17	XT1	I	Crystal for sub clock
18	XT2	—	Crystal for sub clock
19	DVD POWER	O	DVD power on/off
20	KEY INT	I	Wakeup from ECO mode by key input
21	RM_INT	I	Wakeup from ECO mode by sircs input
22	(Can't USE)	I	Can't Use Port
23	AC_CUT	I	Detect AC-CUT (primary power off)
24	DVD SOD	I	Media tech
25	DVD SIO	O	Media tech
26	DVD SCO	I	Media tech clock ＊input from DVD micon
27	FL_D_OUT/LED_DATA	O	FL driver (PT6315) / LED Driver data out
28	LED LAT	O	LED driver latch
29	FL_CLK/LED_CLK	O	FL driver (PT6315) / LED driver clock
30	FL_CS/STB	O	FL driver (PT6315) chip select
31	LED_RESET	O	LED driver reset
32	BACK LIGHT	O	Back light output
33	STBY_LED	O	Standby LED control
34	SIRCS_IN	I	Sircs input
35	EVSS	—	Ground for port
36	EVDD	—	Power supply for Port
37	USE NO	I/O	IIC data (Not used)
38	USE NO	I/O	IIC clock (Not used)
39	DRIVE_RST(EN)	O	Driver signal reset
40	DRIVE_OCP(DIAG)	I	Digital amp (power driver) diag
41	OVERFLOW1	I	Over flow status1 of amp
42	OVERFLOW2	I	Over flow status2 of amp
43	DAMP SCDT	O	Digital amp (CXD9788) data output
44	DAMP SHIFT	O	Digital amp (CXD9788) data output
45	DAMP LATCH1	O	Digital amp (CXD9788) chip select1 signal output
46	DAMP LATCH2	O	Digital amp (CXD9788) chip select2 signal output
47	DAMP LATCH3	O	Digital amp (CXD9788) chip select3 signal output

Pin No.	Pin Name	I/O	Description
48	DAMP INIT	O	Digital amp (CXD9788) reset signal output
49	DAMP SOFT MUTE	O	Digital amp (CXD9788) soft muting output
50	HP SW	I	Switch headphone is insert
51	HP MUTE	O	Control of muting headphone signal
52	IO_DI	I	I/O expander (PT8300) data in / SW2 of CDM
53	IO_DO	O	I/O expander (PT8300) data out / SW3 of CDM
54	IO_CLK	O	I/O expander (PT8300) clock
55	DSP_DOUT	I	DSP (MB86334B) data In
56	DSP_DIN / DIR_DIN	O	DSP (MB86334B)/DIR (LC89052T) data out
57	DSP_CLK / DIR_CLK	O	DSP(MB86334B)/DIR (LC89052T) clock
58	DIR_CSFLAG	I	DIR (LC89056W) csflag in
59	DIR ZERO	I	DIR (LC89056W) zero in
60	(NO USE)	I	RDS clock (Not used)
61	(NO USE)	I	RDS data in (Not used)
62	DSP_ACK	I	DSP (MB86334B) acknowredge
63	DSP_GP9	I	DSP (MB86334B) GP9 in
64	DSP_XRST	O	DSP (MB86334B) reset
65	DSP_HCE	O	DSP (MB86334B) chip enable
66	DSP_BST	O	DSP (MB86334B) bootstrap (for DSP INIT)
67	DSP_PM	O	DSP (MB86334B) pll initial
68	DIR RST	O	DIR (LC89056W) reset out
69	DIR HCE	O	DIR (LC89056W) chip enable signal output
70	DIR RERR	I	DIR (LC89056W) error input
71	BVSS	—	Ground terminal (bus interface)
72	BVDD	—	Power supply terminal (bus interface)
73	DIR XSTATE	I	DIR (LC89056W) change clock status
74	DIR HDOUT	I	DIR (LC89056W) Data input
75	DSP_SKIP	O	DSP GP12
76	AD RST	O	ADC reset (Not used)
77	(NO USE)	O	Not used
78	(NO USE)	O	Not used
79	(NO USE)	O	Not used
80	(NO USE)	O	Not used
81	TUNED	I	Tuner pack tuned in
82	PLL-CLK	O	Tuner clock
83	PLL-DO	O	Tuner data out (uCOM→pack)
84	PLL-CE	O	Tuner chip enable
85	PLL-DI	I	Tuner data in (pack→uCOM)
86	AVS0	O	Audio/Video select0
87	AVS1	O	Audio/Video select1
88	AVS2	O	Audio/Video select2
89	AVS3	O	Audio/Video select3
90	(NO USE)	O	Video output select (DVD select) (Not used)
91	(NO USE)	O	VIDEO output select (RGB select) (Not used)
92	IO_CE	O	I/O expander (PT8300) chip enable / control of loading cd tray (open action)
93	IO_RESET	O	I/O expander (PT8300) reset / control of loading cd tray (close action)
94	KEY2	I	Key input 2

Pin No.	Pin Name	I/O	Description
95	KEY1	I	Key input 1
96	KEY0	I	Key input 0
97	DESTINATION	I	Destination select
98	MODEL	I	Model select
99	DEVICE1	I	Device select1 (DISPLAY)
100	DEVICE2	I	Device select2 (AMP)

• AMP BOARD IC101 to IC106 CXD9774M (POWER DRIVER)

Pin No.	Pin Name	I/O	Description
1	GND	—	Power ground
2	PWM_BP	I	PWM input signal, half-bridge B
3	GND	—	Power ground
4	$\overline{\text{RESET}}$	I	Reset signal
5	DREG_RTN	—	Decoupling return pin
6	GREG	—	Local GVDD decoupling pin
7	M3	I	Output mode selection pin; connect to ground
8	DREG_RTN	—	Digital supply voltage regulator decoupling pin
9	DGND	—	I/O reference ground
10	M1	I	Protection mode selection pin
11	M2	I	Protection mode selection pin
12	DVDD	—	I/O reference supply input
13	$\overline{\text{SD}}$	O	Shutdown signal for half-bridges A and B
14	RESV	—	I/O reference ground
15	$\overline{\text{OTW}}$	O	Overtemperature warning output
16	GND	—	Power ground
17	PWM_AP	I	PWM input signal, half-bridge A
18	GND	—	Power ground
19	GREG	—	Gate drive input voltage
20	GVDD	—	Gate drive input voltage
21	PVSS	—	Power ground
22	BST_A	—	High side bootstrap supply (BST), external resistor and capacitor to OUT_A required
23	PVDD_A	—	Power supply input for half-bridge A
24	PVDD_A	—	Power supply input for half-bridge A
25	OUT_A	O	Output, half-bridge A
26	OUT_A	O	Output, half-bridge A
27	PVSS	—	Power ground
28	PVSS	—	Power ground
29	OUT_B	O	Output, half-bridge B
30	OUT_B	O	Output, half-bridge B
31	PVDD_B	—	Power supply input for half-bridge B
32	PVDD_B	—	Power supply input for half-bridge B
33	BST_B	—	High side bootstrap supply (BST), external resistor and capacitor to OUT_B required
34	PVSS	—	Power ground
35	GVDD_B	—	Gate drive input voltage
36	GREG	—	Gate drive input voltage

SECTION 6
EXPLODED VIEWS

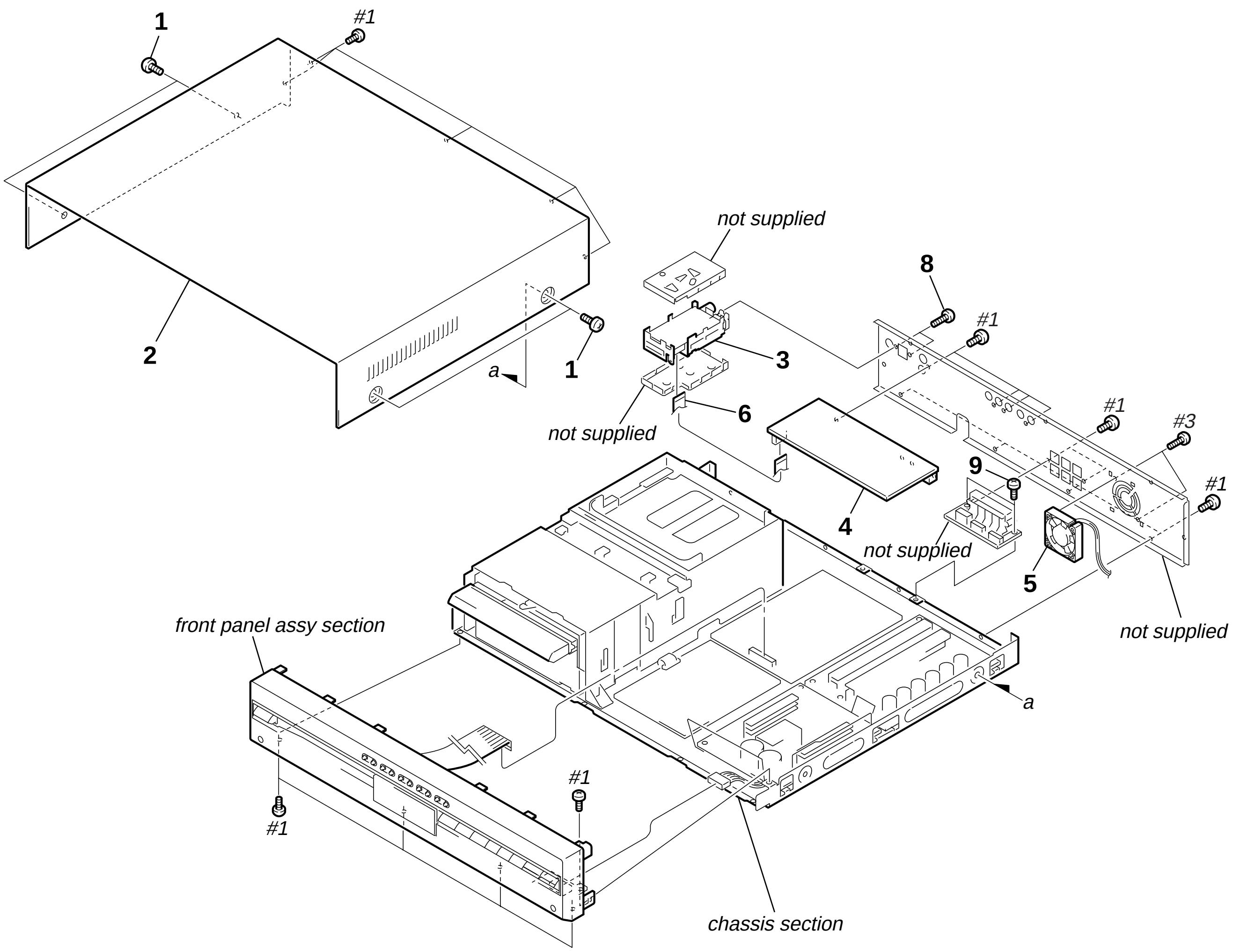
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

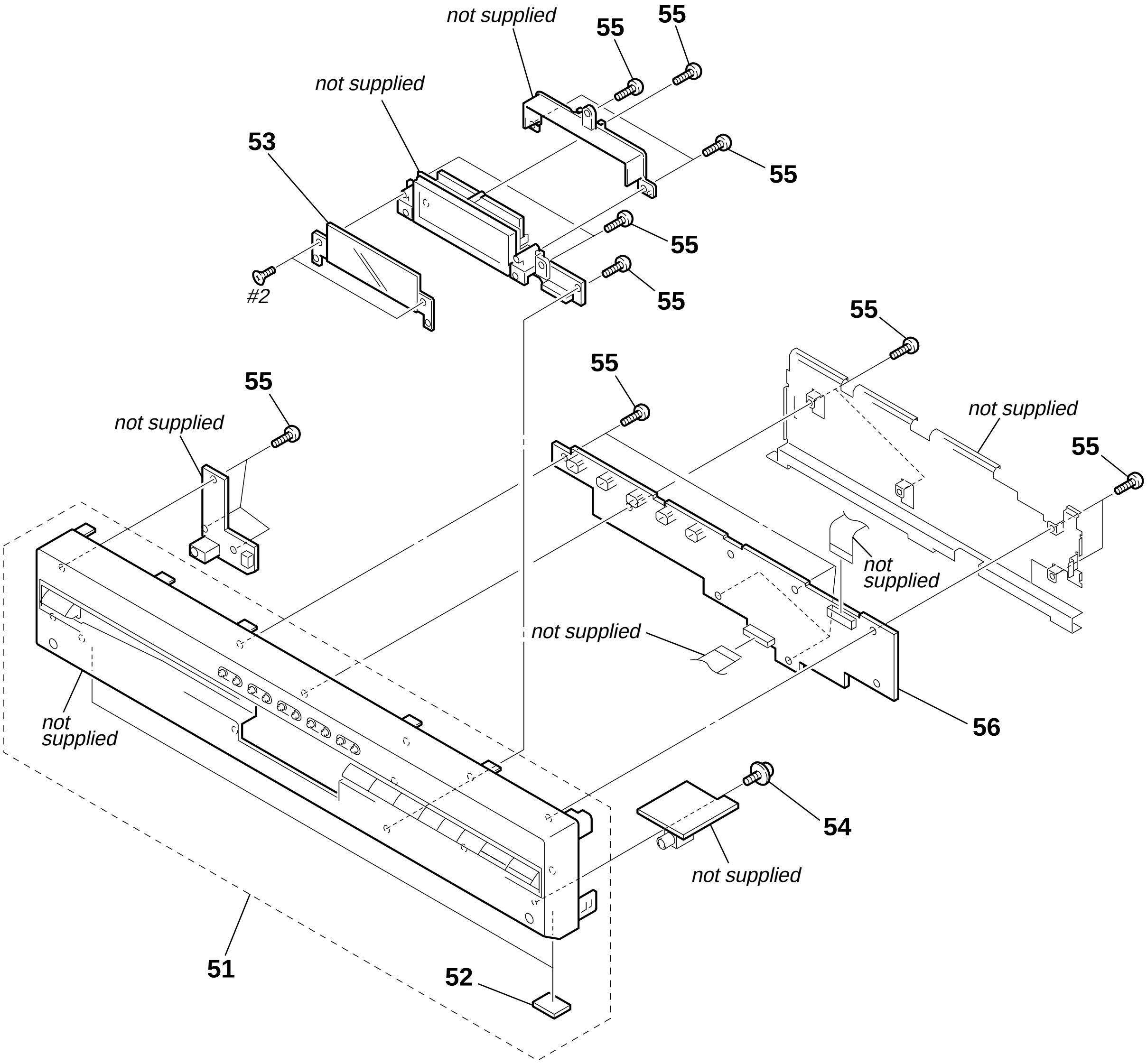
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. OVERALL SECTION


1
#1
2
a
1
not supplied
3
not supplied
6
8
#1
#1
#3
9
#1
4
not supplied
5
front panel assy section
not supplied
a
#1
#1
chassis section

Ref. No.	Part No.	Description	Remark
1	3-363-099-22	SCREW (CASE 3 TP2)	
2	4-252-117-01	CASE	
3	A-4750-572-A	TUNER BOARD,UNIT	
4	A-1060-648-A	IO BOARD, COMPLETE	
5	1-763-861-12	FAN, DC	
6	1-828-962-11	WIRE (FLAT TYPE) (11 CORE)	
7	3-077-331-01	+BV3 (3-CR)	
8	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#3	7-685-881-09	SCREW +BVTT 4X8 (S)	

6-2. FRONT PANEL SECTION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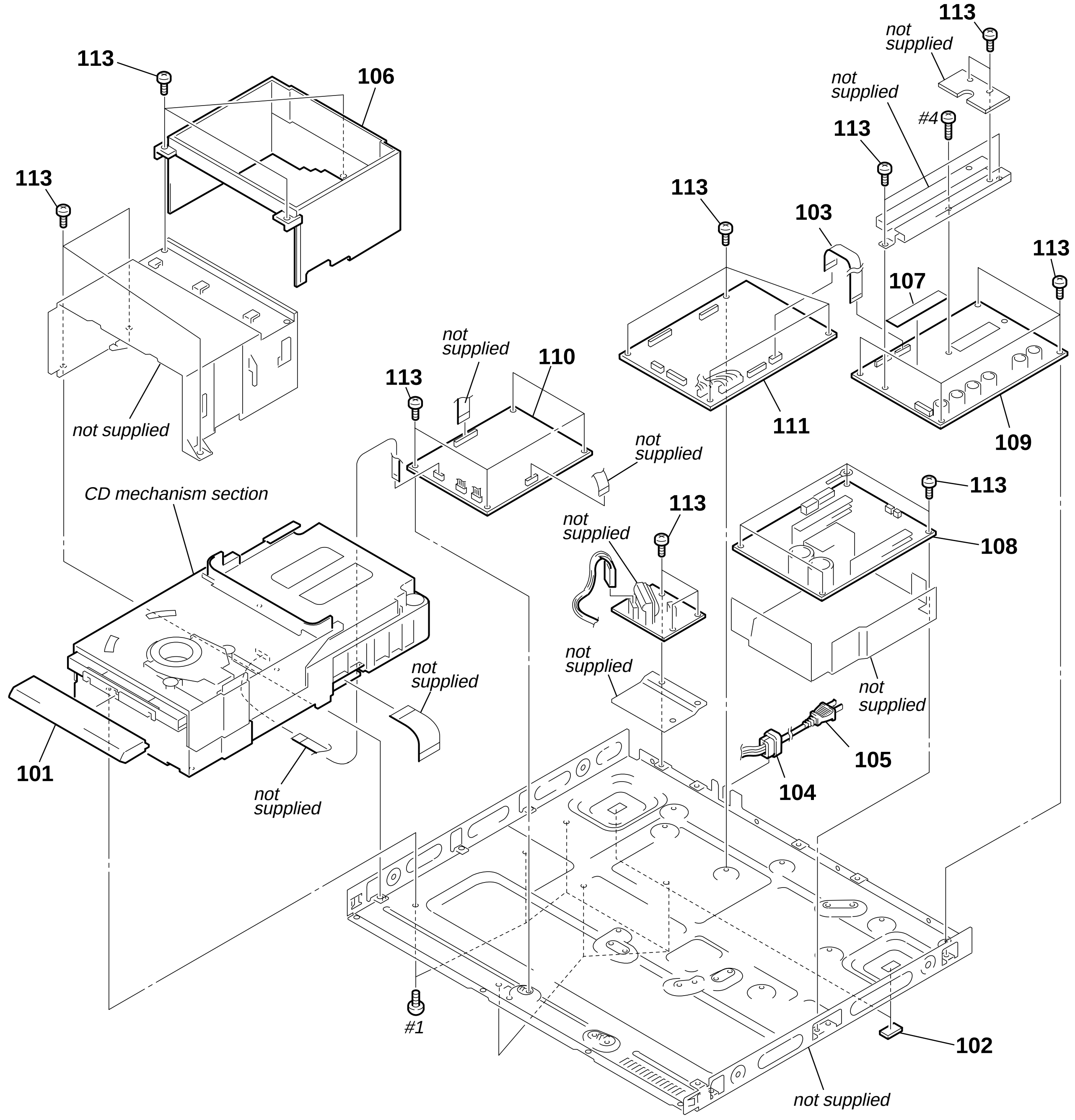
55
55
not supplied
53
55
55
#2
55
55
55
not supplied
55
not supplied
55
not supplied
not supplied
not supplied
56
54
not supplied
51
52

Ref. No.	Part No.	Description	Remark
51	X-4956-431-1	PANEL (BC) ASSY, FRONT (150)	
51	X-2022-054-1	PANEL ASSY, FRONT (250)	
52	4-244-969-01	FOOT (150)	
52	4-244-969-01	FOOT (250)	
53	4-252-123-11	FL, WINDOW	
54	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
55	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
56	A-4752-728-A	PANEL BOARD, COMPLETE	
#2	7-685-233-14	SCREW +KTP 2.6X6 TYPE2NON-SLIT	

6-3. CHASSIS SECTION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#4
113
113
106
113
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103
113
107
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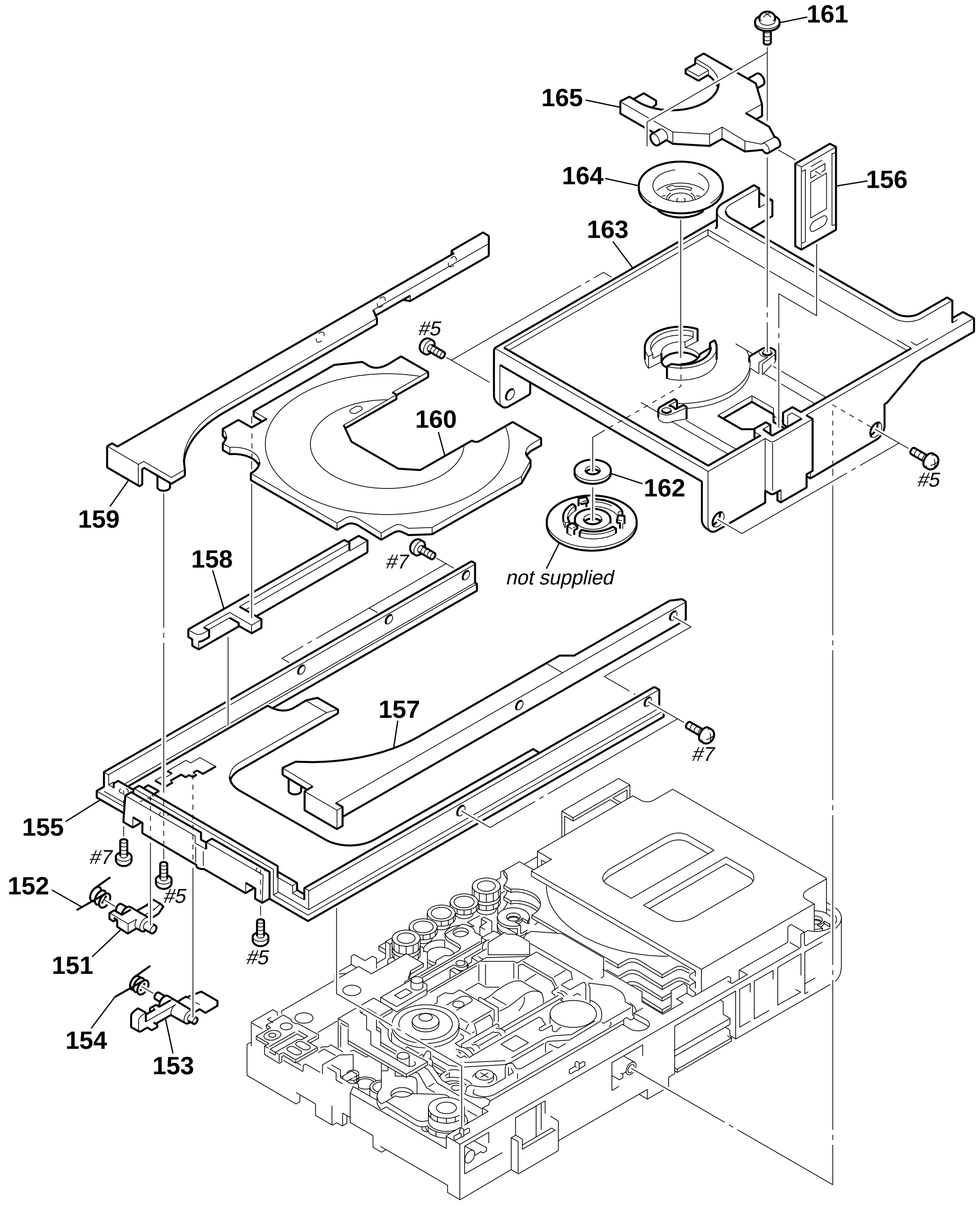
113
110
111
109
not supplied
not supplied
113
CD mechanism section
113
not supplied
108
not supplied
not supplied
not supplied
not supplied
101
105
104
not supplied
#1
102
not supplied

Ref. No.	Part No.	Description	Remark
101	4-252-116-01	LID, DVD	
102	4-244-969-01	FOOT	
103	1-828-954-11	WIRE (FLAT TYPE) (9 CORE)	
104	4-217-350-11	STOPPER, CORD	
⚠105	1-783-531-72	CORD, POWER	
106	2-021-013-01	REAR COVER, MD	
107	4-254-947-11	SHEET (AMP), RADIATION	
⚠108	1-468-836-13	REGULATOR, SWITCHING	
109	A-1060-642-A	AMP BOARD, COMPLETE	
110	A-1060-649-A	DMB09 BOARD, COMPLETE	
111	A-1060-645-A	MAIN (B) BOARD, COMPLETE (150)	
111	A-1067-097-A	MAIN (B) BOARD, COMPLETE (250)	
113	3-077-331-01	+BV3 (3-CR)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-4. DVD MECHANISM DECK SECTION-1 (CDM81C-DVBU100)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165
164
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160
#5
162
159
158
#7
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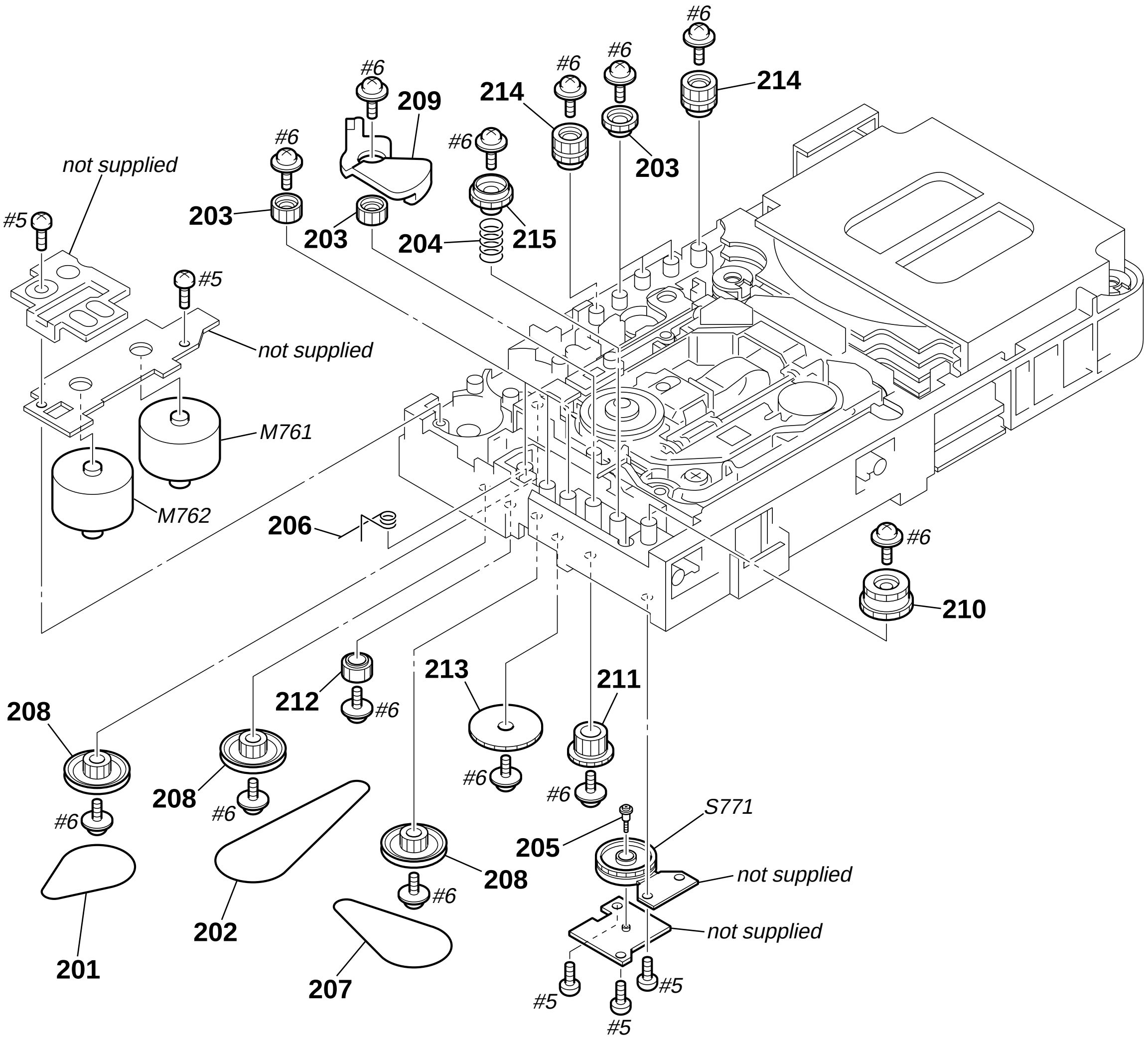
157
#7
155
#7
152
#5
151
#5
154
153

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-251-849-01	LEVER (SW2)		160	4-251-829-02	TRAY (SUB)	
152	4-251-991-01	SPRING (SW2), TORSION		161	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
153	4-251-860-01	LEVER (LOCK)		162	4-251-923-01	YOKE (310)	
154	4-251-867-01	SPRING (LOCK), TORSION		163	4-251-821-02	BRACKET (TOP)	
155	4-251-828-01	TRAY (MAIN)		164	4-251-922-01	PULLEY B (310), CHUCKING	
156	4-251-822-01	JOINT (LIFTER)		165	4-251-824-01	LIFTER	
157	4-251-857-01	COVER (R)		#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
158	4-251-830-01	SLIDER (ST)		#7	7-685-102-19	SCREW +P 2X4 NON-SLIT TYPE 2	
159	4-251-858-01	COVER (L)					

6-5. DVD MECHANISM DECK SECTION-2 (CDM81C-DVBU100)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#6
#6
#6
209
214
214
#6
#6
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not supplied
#5
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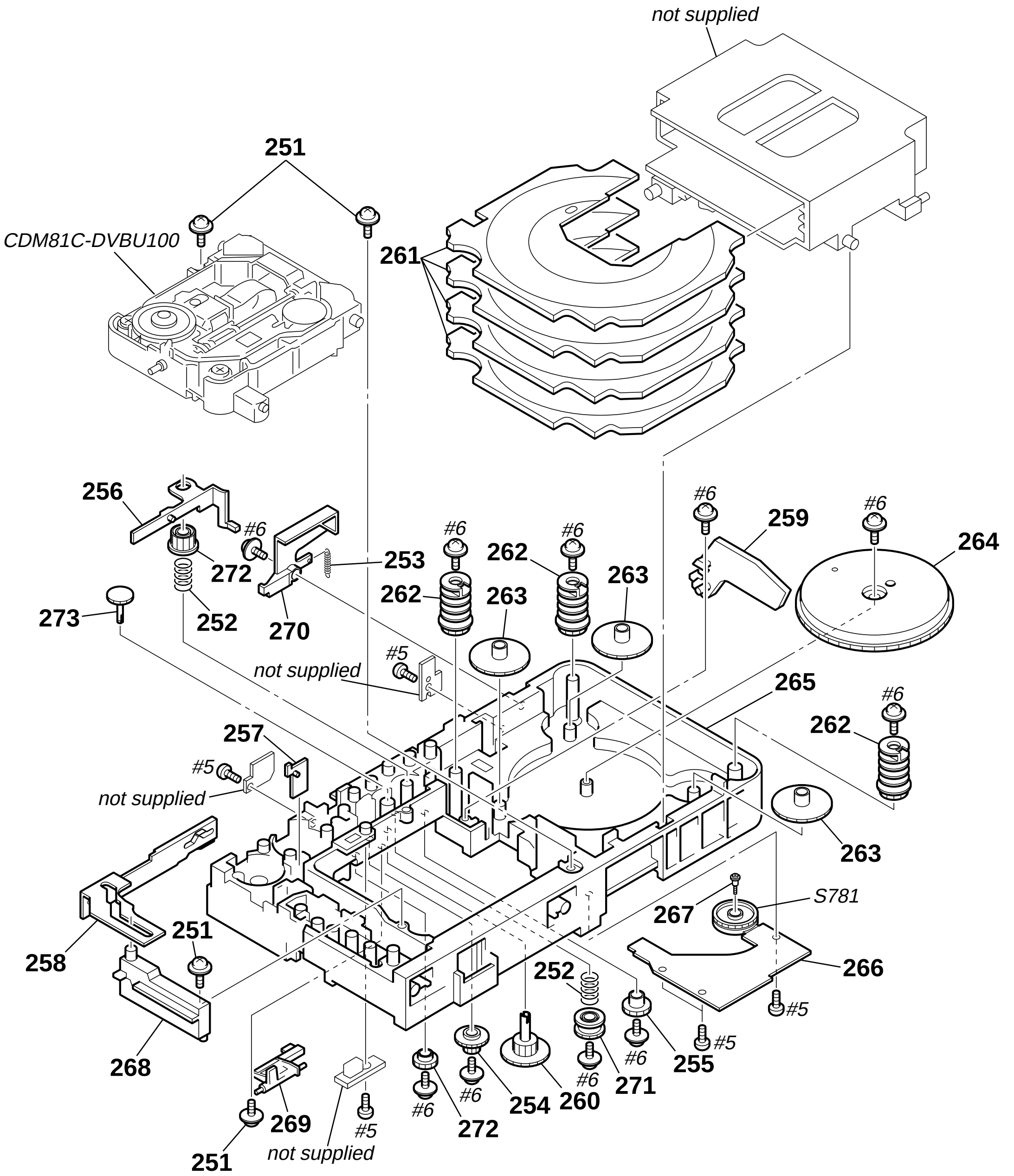
204
215
#5
not supplied
M761
M762
206
#6
210
213
211
208
212
#6
208
#6
#6
#6
S771
205
#6
208
not supplied
not supplied
202
201
207
#5
#5
#5

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	4-251-870-01	BELT (BU)		211	4-251-856-01	GEAR (BU2)	
202	4-251-869-01	BELT (MAIN TRAY)		212	4-251-850-01	GEAR (MAIN TRAY 1)	
203	4-251-841-01	GEAR (SUB TRAY 1)		213	4-251-854-01	GEAR (BU1)	
204	4-251-873-01	SPRING (MODE), COMPRESSION		214	4-251-842-01	GEAR (SUB TRAY 2)	
205	4-239-618-02	SCREW (+PWH, 2X6), STEP TAPPING		215	4-251-851-01	GEAR (MAIN TRAY 2)	
206	4-251-872-01	SPRING (LEVER), TORSION		M761	A-4713-174-A	MOTOR (81) ASSY (LD/ST MOTOR)	
207	4-251-868-01	BELT (SUB TRAY)		M762	A-4713-174-A	MOTOR (81) ASSY (BU U/D MOTOR)	
208	4-251-853-01	PULLEY (BU)		S771	1-478-552-11	ENCODER, ROTARY (MD)	
209	4-251-834-01	LEVER (MAIN TRAY)		#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
210	4-251-852-01	GEAR (MAIN TRAY 3)		#6	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

6-6. DVD MECHANISM DECK SECTION-3
(CDM81C-DVBU100)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251
CDM81C-DVBU100
261
256
#6
272
253
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#6
263
#6
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#6
264
262
263
273
252
270
#5
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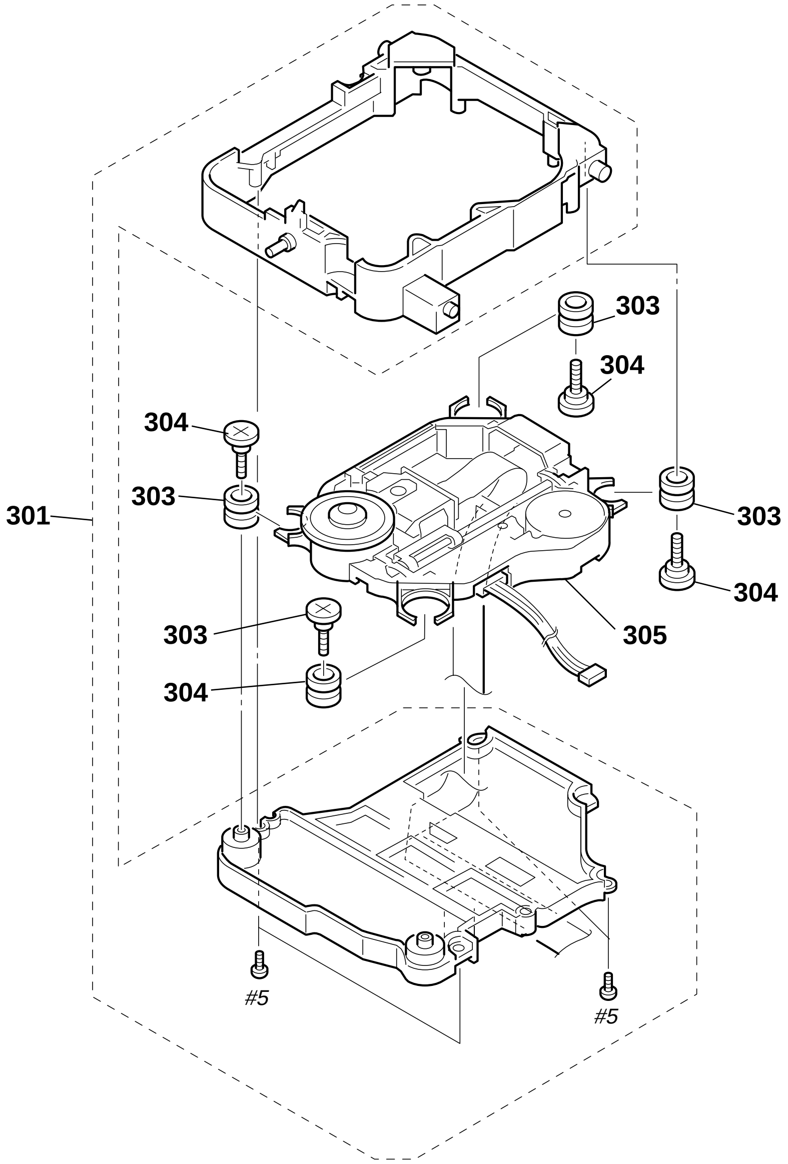
#6
262
257
#5
not supplied
263
S781
267
266
251
258
252
#5
#5
268
#6
255
#6
271
#6
254
260
269
#6
#5
272
not supplied
251

Ref. No.	Part No.	Description	Remark
251	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
252	4-251-873-01	SPRING (MODE), COMPRESSION	
253	4-251-874-02	SPRING (SW), TENSION	
254	4-251-844-01	GEAR (SS2)	
255	4-251-835-01	GEAR (STOCKER 1)	
256	4-251-833-01	LEVER (SUB TRAY)	
257	4-251-843-01	LEVER (RELEASE)	
258	4-251-831-02	LEVER (MODE)	
259	4-251-862-01	SHUTTER (TRAY)	
260	4-251-845-01	GEAR (SS3)	
261	4-251-829-02	TRAY (SUB)	
262	4-251-827-01	CAM (STOCKER)	
263	4-251-836-01	GEAR (STOCKER 2)	
264	4-251-838-01	GEAR (STOCKER 3)	
265	4-251-823-01	CHASSIS (CDM81)	
266	A-4750-232-A	TRANSLATION BOARD, COMPLETE	
267	4-239-618-02	SCREW (+PWH, 2X6), STEP TAPPING	
268	4-251-825-01	CAM (BU)	
269	4-251-832-01	LEVER (STOCKER)	
270	4-251-861-01	LEVER (SW)	
271	4-251-839-01	GEAR (STOCKER 4)	
272	4-251-840-01	GEAR (SUB TRAY)	
273	4-251-847-01	GEAR (SS4)	
S781	1-478-551-11	ENCODER, ROTARY (ST U/D ENCODER)	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#6	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

6-7 BASE UNIT (DVBU100)



Ref. No.	Part No.	Description	Remark
301	X-4956-097-1	HOLDER (310) ASSY	
303	3-088-372-01	INSULATOR	
304	3-087-599-01	INSULATOR SCREW	
⚠305	8-820-255-02	OPTICAL PICK-UP KHM310AAB/C2NP	
#5	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. ., uPA. . : μPA. .,
  uPB. . : μPB. ., uPC. . : μPC. .,
  uPD. . : μPD. .
- Abbreviation
  CND : Canadian model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
	A-1060-642-A	AMP BOARD, COMPLETE ********************			
		< CAPACITOR >			
C101	1-164-346-11	CERAMIC CHIP	1uF		16V
C102	1-164-346-11	CERAMIC CHIP	1uF		16V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C104	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-164-346-11	CERAMIC CHIP	1uF		16V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C111	1-164-346-11	CERAMIC CHIP	1uF		16V
C112	1-164-346-11	CERAMIC CHIP	1uF		16V
C113	1-164-346-11	CERAMIC CHIP	1uF		16V
C114	1-164-346-11	CERAMIC CHIP	1uF		16V
C115	1-164-346-11	CERAMIC CHIP	1uF		16V
C116	1-164-346-11	CERAMIC CHIP	1uF		16V
C131	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C132	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C134	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C135	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C138	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C141	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C142	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C143	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C144	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C145	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C146	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C148	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C149	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C151	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C152	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C153	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C154	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C155	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C156	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C158	1-126-947-11	ELECT	47uF	20%	35V
C160	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C161	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C162	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C163	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C164	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C165	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C166	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C168	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C171	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C172	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C173	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C174	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C175	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C176	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C178	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C181	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C182	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C183	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C184	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C185	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C186	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C188	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C189	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C190	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C191	1-107-898-11	ELECT	2200uF	20%	35V
C192	1-107-898-11	ELECT	2200uF	20%	35V
C193	1-107-898-11	ELECT	2200uF	20%	35V
C194	1-107-898-11	ELECT	2200uF	20%	35V
C195	1-107-898-11	ELECT	2200uF	20%	35V
C196	1-110-617-51	ELECT	2200uF	20%	50V
C198	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C199	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C200	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C201	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C202	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C203	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C204	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C205	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C206	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C207	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C208	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C209	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C210	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C211	1-136-177-00	FILM	1uF	5%	50V
C212	1-136-177-00	FILM	1uF	5%	50V
C213	1-136-177-00	FILM	1uF	5%	50V
C214	1-136-177-00	FILM	1uF	5%	50V
C215	1-136-177-00	FILM	1uF	5%	50V
C216	1-136-177-00	FILM	1uF	5%	50V
C221	1-136-177-00	FILM	1uF	5%	50V

AMP

Ref. No.	Part No.	Description			Remark
C222	1-136-177-00	FILM	1uF	5%	50V
C223	1-136-177-00	FILM	1uF	5%	50V
C224	1-136-177-00	FILM	1uF	5%	50V
C225	1-136-177-00	FILM	1uF	5%	50V
C226	1-136-177-00	FILM	1uF	5%	50V
C248	1-126-947-11	ELECT	47uF	20%	35V
C251	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C252	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C253	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C254	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C255	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C256	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C261	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C262	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C263	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C264	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C265	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C266	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C271	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C272	1-125-898-91	CERAMIC CHIP	0.22uF	10%	50V
C275	1-162-294-31	CERAMIC	0.001uF	10%	50V
C276	1-162-294-31	CERAMIC	0.001uF	10%	50V
C277	1-162-294-31	CERAMIC	0.001uF	10%	50V
C278	1-162-294-31	CERAMIC	0.001uF	10%	50V
C281	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C282	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C283	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C284	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C285	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C286	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C287	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C288	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C289	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C290	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C291	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C292	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C301	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C304	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C305	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C306	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C309	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C310	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C311	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C312	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C313	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C314	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C315	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C316	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C319	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C320	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C321	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C322	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C323	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C324	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C325	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C326	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C327	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C328	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C329	1-126-947-11	ELECT	47uF	20%	35V
C330	1-126-947-11	ELECT	47uF	20%	35V
C331	1-126-947-11	ELECT	47uF	20%	35V
C332	1-126-947-11	ELECT	47uF	20%	35V
C333	1-126-947-11	ELECT	47uF	20%	35V
C334	1-126-947-11	ELECT	47uF	20%	35V
C335	1-126-947-11	ELECT	47uF	20%	35V
C336	1-126-947-11	ELECT	47uF	20%	35V
C337	1-126-947-11	ELECT	47uF	20%	35V
C350	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C351	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C352	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C353	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C354	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C355	1-126-933-11	ELECT	100uF	20%	16V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C358	1-126-925-91	ELECT	470uF	20%	10V
C359	1-126-925-91	ELECT	470uF	20%	10V
C360	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C361	1-126-947-11	ELECT	47uF	20%	35V
C362	1-104-658-91	ELECT	100uF	20%	10V
C363	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C366	1-126-934-11	ELECT	220uF	20%	16V
C367	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C368	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C370	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C371	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C372	1-126-960-11	ELECT	1uF	20%	50V
C374	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C375	1-126-933-11	ELECT	100uF	20%	16V
C377	1-126-964-11	ELECT	10uF	20%	50V
C380	1-126-923-91	ELECT	220uF	20%	10V
C381	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C382	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C383	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C384	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C385	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C391	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C392	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C393	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C394	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C395	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C396	1-117-370-11	CERAMIC CHIP	10uF		10V
C402	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C403	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C404	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C405	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C406	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C436	1-162-927-11	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CN300	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN301	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P	
CN302	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P	
CN306	1-691-766-21	PLUG (MICRO CONNECTOR) 4P	
CN307	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
* CN313	1-564-243-11	PIN, CONNECTOR (3.96mm PITCH) 6P	
		< DIODE >	
D101	6-500-260-01	DIODE P6SMB39AT3	
D102	6-500-260-01	DIODE P6SMB39AT3	
D103	6-500-260-01	DIODE P6SMB39AT3	
D104	6-500-260-01	DIODE P6SMB39AT3	
D105	6-500-260-01	DIODE P6SMB39AT3	
D106	6-500-260-01	DIODE P6SMB39AT3	
D201	6-500-260-01	DIODE P6SMB39AT3	
D202	6-500-260-01	DIODE P6SMB39AT3	
D203	6-500-260-01	DIODE P6SMB39AT3	
D204	6-500-260-01	DIODE P6SMB39AT3	
D205	6-500-260-01	DIODE P6SMB39AT3	
D206	6-500-260-01	DIODE P6SMB39AT3	
D208	8-719-421-15	DIODE MA8027-L	
D303	8-719-988-61	DIODE 1SS355TE-17	
D304	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB301	1-469-760-21	FERRITE, EMI (SMD) (2012)	
		< IC >	
IC101	6-704-802-01	IC CXD9774M	
IC102	6-704-802-01	IC CXD9774M	
IC103	6-704-802-01	IC CXD9774M	
IC104	6-704-802-01	IC CXD9774M	
IC105	6-704-802-01	IC CXD9774M	
IC106	6-704-802-01	IC CXD9774M	
IC108	6-705-979-01	IC CXD9788AR	
IC109	6-705-979-01	IC CXD9788AR	
IC110	6-705-979-01	IC CXD9788AR	
IC301	6-705-720-01	IC RC4580IDR	
IC303	6-702-300-01	IC TK11118CSCL-G	
IC305	6-701-189-01	IC MC74VHC1GU04DFT1	
		< SHORT >	
JR401	1-216-864-11	SHORT CHIP 0	
JR402	1-216-864-11	SHORT CHIP 0	
JR403	1-216-864-11	SHORT CHIP 0	
JR404	1-216-864-11	SHORT CHIP 0	
JR405	1-216-864-11	SHORT CHIP 0	
JR406	1-216-864-11	SHORT CHIP 0	
JR407	1-216-864-11	SHORT CHIP 0	
JR408	1-216-864-11	SHORT CHIP 0	
JR409	1-216-864-11	SHORT CHIP 0	
JR411	1-216-864-11	SHORT CHIP 0	
JR412	1-216-864-11	SHORT CHIP 0	

Ref. No.	Part No.	Description	Remark
		< COIL >	
L121	1-456-680-11	INDUCTOR 10uH	
L122	1-456-680-11	INDUCTOR 10uH	
L123	1-456-680-11	INDUCTOR 10uH	
L124	1-456-680-11	INDUCTOR 10uH	
L125	1-456-680-11	INDUCTOR 10uH	
L126	1-456-680-11	INDUCTOR 10uH	
L131	1-456-680-11	INDUCTOR 10uH	
L132	1-456-680-11	INDUCTOR 10uH	
L133	1-456-680-11	INDUCTOR 10uH	
L134	1-456-680-11	INDUCTOR 10uH	
L135	1-456-680-11	INDUCTOR 10uH	
L136	1-456-680-11	INDUCTOR 10uH	
L302	1-412-939-11	INDUCTOR 1uH	
		< TRANSISTOR >	
Q101	8-729-602-36	TRANSISTOR 2SA1602-F	
Q102	8-729-602-36	TRANSISTOR 2SA1602-F	
Q103	8-729-602-36	TRANSISTOR 2SA1602-F	
Q104	8-729-602-36	TRANSISTOR 2SA1602-F	
Q105	8-729-602-36	TRANSISTOR 2SA1602-F	
Q106	8-729-602-36	TRANSISTOR 2SA1602-F	
Q107	8-729-602-36	TRANSISTOR 2SA1602-F	
Q108	8-729-602-36	TRANSISTOR 2SA1602-F	
Q109	8-729-602-36	TRANSISTOR 2SA1602-F	
Q110	8-729-602-36	TRANSISTOR 2SA1602-F	
Q111	8-729-602-36	TRANSISTOR 2SA1602-F	
Q112	8-729-602-36	TRANSISTOR 2SA1602-F	
Q301	8-729-034-51	TRANSISTOR KTC3875	
Q303	8-729-801-84	TRANSISTOR 2SB1013-4	
Q304	8-729-038-68	TRANSISTOR KRC103S	
		< RESISTOR >	
R108	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R109	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R110	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R111	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R112	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R113	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R114	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R115	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R116	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R117	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R118	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R119	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R129	1-216-809-11	METAL CHIP 100 5% 1/10W	
R131	1-216-864-11	SHORT CHIP 0	
R132	1-216-864-11	SHORT CHIP 0	
R133	1-216-864-11	SHORT CHIP 0	
R134	1-216-864-11	SHORT CHIP 0	
R135	1-216-864-11	SHORT CHIP 0	
R136	1-216-864-11	SHORT CHIP 0	
R139	1-216-864-11	SHORT CHIP 0	
R141	1-216-864-11	SHORT CHIP 0	
R142	1-216-864-11	SHORT CHIP 0	
R143	1-216-864-11	SHORT CHIP 0	
R144	1-216-864-11	SHORT CHIP 0	
R145	1-216-864-11	SHORT CHIP 0	

AMP

Ref. No.	Part No.	Description			Remark
R146	1-216-864-11	SHORT CHIP	0		
R151	1-216-864-11	SHORT CHIP	0		
R152	1-216-864-11	SHORT CHIP	0		
R153	1-216-864-11	SHORT CHIP	0		
R154	1-216-864-11	SHORT CHIP	0		
R155	1-216-864-11	SHORT CHIP	0		
R156	1-216-864-11	SHORT CHIP	0		
R161	1-216-864-11	SHORT CHIP	0		
R162	1-216-864-11	SHORT CHIP	0		
R163	1-216-864-11	SHORT CHIP	0		
R164	1-216-864-11	SHORT CHIP	0		
R165	1-216-864-11	SHORT CHIP	0		
R166	1-216-864-11	SHORT CHIP	0		
R171	1-216-864-11	SHORT CHIP	0		
R172	1-216-864-11	SHORT CHIP	0		
R173	1-216-864-11	SHORT CHIP	0		
R174	1-216-864-11	SHORT CHIP	0		
R175	1-216-864-11	SHORT CHIP	0		
R176	1-216-864-11	SHORT CHIP	0		
R191	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R192	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R193	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R194	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R195	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R196	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R201	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R202	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R203	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R204	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R205	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R206	1-220-942-11	METAL CHIP	3.3	1%	1/4W
R211	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R212	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R213	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R214	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R215	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R216	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R221	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R222	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R223	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R224	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R225	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R226	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R229	1-216-809-11	METAL CHIP	100	5%	1/10W
R231	1-216-809-11	METAL CHIP	100	5%	1/10W
R233	1-216-809-11	METAL CHIP	100	5%	1/10W
R235	1-216-809-11	METAL CHIP	100	5%	1/10W
R237	1-216-809-11	METAL CHIP	100	5%	1/10W
R241	1-216-809-11	METAL CHIP	100	5%	1/10W
R242	1-216-809-11	METAL CHIP	100	5%	1/10W
R243	1-216-809-11	METAL CHIP	100	5%	1/10W
R244	1-216-809-11	METAL CHIP	100	5%	1/10W
R245	1-216-809-11	METAL CHIP	100	5%	1/10W
R246	1-216-809-11	METAL CHIP	100	5%	1/10W
R300	1-216-817-11	METAL CHIP	470	5%	1/10W
R302	1-216-817-11	METAL CHIP	470	5%	1/10W
R303	1-216-817-11	METAL CHIP	470	5%	1/10W
R304	1-216-817-11	METAL CHIP	470	5%	1/10W
R305	1-216-817-11	METAL CHIP	470	5%	1/10W
R306	1-216-817-11	METAL CHIP	470	5%	1/10W
R308	1-216-817-11	METAL CHIP	470	5%	1/10W
R309	1-216-864-11	SHORT CHIP	0		
R310	1-216-809-11	METAL CHIP	100	5%	1/10W
R311	1-216-809-11	METAL CHIP	100	5%	1/10W
R312	1-216-809-11	METAL CHIP	100	5%	1/10W
R313	1-216-809-11	METAL CHIP	100	5%	1/10W
R314	1-216-809-11	METAL CHIP	100	5%	1/10W
R315	1-216-803-11	METAL CHIP	33	5%	1/10W
R316	1-216-817-11	METAL CHIP	470	5%	1/10W
R317	1-216-817-11	METAL CHIP	470	5%	1/10W
R318	1-216-817-11	METAL CHIP	470	5%	1/10W
R319	1-216-833-11	METAL CHIP	10K	5%	1/10W
R320	1-216-864-11	SHORT CHIP	0		
R321	1-216-864-11	SHORT CHIP	0		
R322	1-216-833-11	METAL CHIP	10K	5%	1/10W
R323	1-216-864-11	SHORT CHIP	0		
R324	1-216-864-11	SHORT CHIP	0		
R325	1-216-864-11	SHORT CHIP	0		
R326	1-216-864-11	SHORT CHIP	0		
R327	1-216-864-11	SHORT CHIP	0		
R328	1-216-864-11	SHORT CHIP	0		
R329	1-216-864-11	SHORT CHIP	0		
R330	1-216-837-11	METAL CHIP	22K	5%	1/10W
R331	1-216-837-11	METAL CHIP	22K	5%	1/10W
R332	1-216-837-11	METAL CHIP	22K	5%	1/10W
R333	1-216-837-11	METAL CHIP	22K	5%	1/10W
R334	1-216-837-11	METAL CHIP	22K	5%	1/10W
R335	1-216-837-11	METAL CHIP	22K	5%	1/10W
R336	1-216-837-11	METAL CHIP	22K	5%	1/10W
R337	1-216-837-11	METAL CHIP	22K	5%	1/10W
R338	1-218-725-11	METAL CHIP	24K	0.5%	1/10W
R339	1-218-725-11	METAL CHIP	24K	0.5%	1/10W
R340	1-216-839-11	METAL CHIP	33K	5%	1/10W
R341	1-216-839-11	METAL CHIP	33K	5%	1/10W
R342	1-216-864-11	SHORT CHIP	0		
R343	1-216-864-11	SHORT CHIP	0		
R344	1-216-817-11	METAL CHIP	470	5%	1/10W
R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R346	1-216-817-11	METAL CHIP	470	5%	1/10W
R347	1-216-833-11	METAL CHIP	10K	5%	1/10W
R348	1-216-817-11	METAL CHIP	470	5%	1/10W
R349	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R350	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R351	1-216-817-11	METAL CHIP	470	5%	1/10W
R361	1-216-845-11	METAL CHIP	100K	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W
R363	1-216-845-11	METAL CHIP	100K	5%	1/10W
R364	1-216-845-11	METAL CHIP	100K	5%	1/10W
R365	1-216-845-11	METAL CHIP	100K	5%	1/10W
R366	1-216-845-11	METAL CHIP	100K	5%	1/10W
R371	1-216-818-11	METAL CHIP	560	5%	1/10W
R372	1-216-818-11	METAL CHIP	560	5%	1/10W
R373	1-216-818-11	METAL CHIP	560	5%	1/10W
R374	1-216-818-11	METAL CHIP	560	5%	1/10W
R375	1-216-818-11	METAL CHIP	560	5%	1/10W

Ref. No.	Part No.	Description			Remark
R376	1-216-818-11	METAL CHIP	560	5%	1/10W
R377	1-216-818-11	METAL CHIP	560	5%	1/10W
R378	1-216-818-11	METAL CHIP	560	5%	1/10W
R379	1-216-818-11	METAL CHIP	560	5%	1/10W
R380	1-216-818-11	METAL CHIP	560	5%	1/10W
R381	1-216-818-11	METAL CHIP	560	5%	1/10W
R382	1-216-818-11	METAL CHIP	560	5%	1/10W
R383	1-216-818-11	METAL CHIP	560	5%	1/10W
R384	1-216-818-11	METAL CHIP	560	5%	1/10W
R393	1-216-801-11	METAL CHIP	22	5%	1/10W
R394	1-216-857-11	METAL CHIP	1M	5%	1/10W
R395	1-216-845-11	METAL CHIP	100K	5%	1/10W
R396	1-216-809-11	METAL CHIP	100	5%	1/10W
R400	1-216-845-11	METAL CHIP	100K	5%	1/10W
R401	1-216-845-11	METAL CHIP	100K	5%	1/10W
R402	1-216-845-11	METAL CHIP	100K	5%	1/10W
R403	1-216-845-11	METAL CHIP	100K	5%	1/10W
R404	1-216-845-11	METAL CHIP	100K	5%	1/10W
R405	1-216-845-11	METAL CHIP	100K	5%	1/10W
R406	1-216-845-11	METAL CHIP	100K	5%	1/10W
R407	1-216-845-11	METAL CHIP	100K	5%	1/10W
R408	1-216-845-11	METAL CHIP	100K	5%	1/10W
R409	1-216-845-11	METAL CHIP	100K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-845-11	METAL CHIP	100K	5%	1/10W
R412	1-216-845-11	METAL CHIP	100K	5%	1/10W
R425	1-216-819-11	METAL CHIP	680	5%	1/10W
R426	1-216-819-11	METAL CHIP	680	5%	1/10W
R427	1-216-821-11	METAL CHIP	1K	5%	1/10W
R428	1-216-841-11	METAL CHIP	47K	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-845-11	METAL CHIP	100K	5%	1/10W
R450	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
R453	1-216-833-11	METAL CHIP	10K	5%	1/10W
R456	1-216-833-11	METAL CHIP	10K	5%	1/10W
R457	1-216-833-11	METAL CHIP	10K	5%	1/10W
R458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R459	1-216-833-11	METAL CHIP	10K	5%	1/10W
R460	1-216-833-11	METAL CHIP	10K	5%	1/10W
R461	1-216-833-11	METAL CHIP	10K	5%	1/10W
R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-833-11	METAL CHIP	10K	5%	1/10W
R482	1-216-833-11	METAL CHIP	10K	5%	1/10W
R483	1-216-833-11	METAL CHIP	10K	5%	1/10W
R484	1-216-833-11	METAL CHIP	10K	5%	1/10W
R487	1-216-833-11	METAL CHIP	10K	5%	1/10W
R488	1-216-833-11	METAL CHIP	10K	5%	1/10W
R489	1-216-833-11	METAL CHIP	10K	5%	1/10W
R490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-833-11	METAL CHIP	10K	5%	1/10W
R495	1-216-833-11	METAL CHIP	10K	5%	1/10W
R496	1-216-833-11	METAL CHIP	10K	5%	1/10W
R497	1-216-833-11	METAL CHIP	10K	5%	1/10W

< VIBRATOR >

Ref. No.	Part No.	Description			Remark
X450	1-795-660-21	QUARTZ CRYSTAL UNIT (49.152MHz)			

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AMP RETAINER BOARD
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A-1060-649-A DMB09 BOARD, COMPLETE
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< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C104	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C106	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C107	1-124-779-00	ELECT CHIP	10uF	20%	16V
C109	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C112	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C114	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C115	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C116	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C120	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C121	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C123	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C124	1-124-779-00	ELECT CHIP	10uF	20%	16V
C125	1-126-204-11	ELECT CHIP	47uF	20%	16V
C126	1-126-204-11	ELECT CHIP	47uF	20%	16V
C132	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C138	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C139	1-124-779-00	ELECT CHIP	10uF	20%	16V
C140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C141	1-124-779-00	ELECT CHIP	10uF	20%	16V
C142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C143	1-124-779-00	ELECT CHIP	10uF	20%	16V
C144	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C145	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C147	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C148	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C152	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C153	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C154	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C161	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C165	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C166	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C168	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C169	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C171	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C172	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C173	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

DMB09

Ref. No.	Part No.	Description			Remark
C175	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C176	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C177	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C178	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C179	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C180	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C181	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C184	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C185	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C186	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C189	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C190	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C193	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C194	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C197	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C198	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C199	1-164-392-11	CERAMIC CHIP	390PF	5%	50V
C202	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C206	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C207	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C212	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C214	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C215	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C216	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C218	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C220	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C222	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C223	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C225	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C227	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C229	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C231	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C232	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
C236	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C237	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C239	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C240	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C241	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C244	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C245	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C246	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C247	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C248	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C249	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C250	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C251	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C255	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C256	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C257	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C259	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C260	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C263	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C264	1-126-205-11	ELECT CHIP	47uF	20%	6.3V

Ref. No.	Part No.	Description			Remark
C266	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C268	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C269	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C270	1-126-204-11	ELECT CHIP	47uF	20%	16V
C273	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN103	1-815-763-11	CONNECTOR, FFC/FPC 24P			
CN201	1-784-370-31	CONNECTOR, FFC/FPC 11P			
CN202	1-784-370-31	CONNECTOR, FFC/FPC 11P			
CN205	1-779-993-11	PIN, CONNECTOR (PWB) 5P			
		< FERRITE BEAD >			
FB201	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB202	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB203	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB204	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB205	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB206	1-469-324-21	FERRITE, EMI (SMD) (2012)			
		< FILTER >			
FL203	1-234-177-21	FILTER, CHIP EMI			
FL204	1-234-177-21	FILTER, CHIP EMI			
FL205	1-234-177-21	FILTER, CHIP EMI			
FL207	1-234-177-21	FILTER, CHIP EMI			
FL208	1-234-177-21	FILTER, CHIP EMI			
FL209	1-233-893-21	FILTER, CHIP EMI			
		< IC >			
IC101	6-704-524-01	IC FAN8036L			
IC102	6-704-471-01	IC CXD9780R			
IC151	6-704-470-01	IC TK11233CMCL-G			
IC201	6-704-472-01	IC CXD9781R			
IC202	6-704-261-01	IC TK11225CMCL-G			
IC204	6-804-503-01	IC MBM29LV160BE-70PFTN-BC0401			
IC205	6-704-004-01	IC BR24L16F-WE2			
IC206	6-706-346-01	IC A2V64S40DTP-G75-T			
IC208	6-702-302-01	IC TK11133CSCL-G			
		< TRANSISTOR >			
Q168	8-729-424-59	TRANSISTOR	UN2212		
Q170	6-550-554-01	TRANSISTOR	UM6K1NL02TN		
Q171	6-550-653-01	TRANSISTOR	QST8TR		
		< RESISTOR >			
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R103	1-216-839-11	METAL CHIP	33K	5%	1/10W
R104	1-216-839-11	METAL CHIP	33K	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R109	1-216-834-11	METAL CHIP	12K	5%	1/10W
R110	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R111	1-216-835-11	METAL CHIP	15K	5%	1/10W
R112	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R114	1-216-833-11	METAL CHIP	10K	5%	1/10W
R117	1-216-834-11	METAL CHIP	12K	5%	1/10W
R119	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R120	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R121	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R122	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R123	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R124	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R126	1-216-838-11	METAL CHIP	27K	5%	1/10W
R127	1-216-833-11	METAL CHIP	10K	5%	1/10W
R129	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R130	1-218-877-11	METAL CHIP	18K	0.5%	1/10W
R131	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R136	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R137	1-216-864-11	SHORT CHIP	0		
R155	1-216-821-11	METAL CHIP	1K	5%	1/10W
R156	1-216-821-11	METAL CHIP	1K	5%	1/10W
R157	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R158	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R165	1-216-864-11	SHORT CHIP	0		
R166	1-216-864-11	SHORT CHIP	0		
R167	1-216-864-11	SHORT CHIP	0		
R168	1-216-864-11	SHORT CHIP	0		
R172	1-216-845-11	METAL CHIP	100K	5%	1/10W
R173	1-216-845-11	METAL CHIP	100K	5%	1/10W
R175	1-216-809-11	METAL CHIP	100	5%	1/10W
R176	1-216-864-11	SHORT CHIP	0		
R178	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R179	1-216-801-11	METAL CHIP	22	5%	1/10W
R180	1-216-809-11	METAL CHIP	100	5%	1/10W
R181	1-216-821-11	METAL CHIP	1K	5%	1/10W
R182	1-216-841-11	METAL CHIP	47K	5%	1/10W
R183	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R184	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R185	1-216-857-11	METAL CHIP	1M	5%	1/10W
R186	1-216-841-11	METAL CHIP	47K	5%	1/10W
R187	1-216-864-11	SHORT CHIP	0		
R188	1-216-801-11	METAL CHIP	22	5%	1/10W
R189	1-216-801-11	METAL CHIP	22	5%	1/10W
R190	1-216-864-11	SHORT CHIP	0		
R191	1-216-864-11	SHORT CHIP	0		
R192	1-216-841-11	METAL CHIP	47K	5%	1/10W
R193	1-216-864-11	SHORT CHIP	0		
R194	1-216-864-11	SHORT CHIP	0		
R195	1-216-833-11	METAL CHIP	10K	5%	1/10W
R197	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R198	1-216-821-11	METAL CHIP	1K	5%	1/10W
R199	1-216-835-11	METAL CHIP	15K	5%	1/10W
R201	1-216-864-11	SHORT CHIP	0		
R202	1-216-864-11	SHORT CHIP	0		
R203	1-216-821-11	METAL CHIP	1K	5%	1/10W
R205	1-216-864-11	SHORT CHIP	0		
R206	1-216-864-11	SHORT CHIP	0		
R207	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R208	1-216-864-11	SHORT CHIP	0		
R209	1-216-864-11	SHORT CHIP	0		
R210	1-216-864-11	SHORT CHIP	0		
R213	1-216-833-11	METAL CHIP	10K	5%	1/10W
R215	1-216-864-11	SHORT CHIP	0		
R216	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R220	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R224	1-216-864-11	SHORT CHIP	0		
R225	1-216-821-11	METAL CHIP	1K	5%	1/10W
R226	1-216-821-11	METAL CHIP	1K	5%	1/10W
R227	1-216-845-11	METAL CHIP	100K	5%	1/10W
R244	1-216-836-11	METAL CHIP	18K	5%	1/10W
R247	1-216-809-11	METAL CHIP	100	5%	1/10W
R248	1-216-845-11	METAL CHIP	100K	5%	1/10W
R249	1-216-864-11	SHORT CHIP	0		
R255	1-216-809-11	METAL CHIP	100	5%	1/10W
R260	1-216-801-11	METAL CHIP	22	5%	1/10W
R261	1-216-805-11	METAL CHIP	47	5%	1/10W
R263	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R264	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R265	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R266	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R267	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R268	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R271	1-216-809-11	METAL CHIP	100	5%	1/10W
R276	1-218-839-11	METAL CHIP	470	0.5%	1/10W
R280	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R284	1-216-805-11	METAL CHIP	47	5%	1/10W
R285	1-216-805-11	METAL CHIP	47	5%	1/10W
R286	1-216-805-11	METAL CHIP	47	5%	1/10W
R287	1-216-805-11	METAL CHIP	47	5%	1/10W
R288	1-216-805-11	METAL CHIP	47	5%	1/10W
R289	1-218-916-11	METAL CHIP	750K	0.5%	1/10W
R298	1-216-833-11	METAL CHIP	10K	5%	1/10W
R299	1-216-833-11	METAL CHIP	10K	5%	1/10W
R501	1-216-833-11	METAL CHIP	10K	5%	1/10W
R502	1-216-864-11	SHORT CHIP	0		
R507	1-216-864-11	SHORT CHIP	0		
R508	1-216-864-11	SHORT CHIP	0		
R509	1-216-864-11	SHORT CHIP	0		
R510	1-216-864-11	SHORT CHIP	0		
R1015	1-216-809-11	METAL CHIP	100	5%	1/10W
R1018	1-216-864-11	SHORT CHIP	0		
R1019	1-216-864-11	SHORT CHIP	0		
R1020	1-216-864-11	SHORT CHIP	0		
R1021	1-216-864-11	SHORT CHIP	0		
R1022	1-216-864-11	SHORT CHIP	0		
R1023	1-216-864-11	SHORT CHIP	0		
R1026	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1027	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2004	1-216-864-11	SHORT CHIP	0		
R2006	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2007	1-211-985-11	METAL CHIP	47	0.5%	1/10W
R2027	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2030	1-216-833-11	METAL CHIP	10K	5%	1/10W

< COMPOSITION CIRCUIT BLOCK >

RB204	1-234-371-21	RES, NETWORK 47X4 (1005)			
RB205	1-234-371-21	RES, NETWORK 47X4 (1005)			
RB206	1-234-371-21	RES, NETWORK 47X4 (1005)			
RB2031	1-234-371-21	RES, NETWORK 47X4 (1005)			

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X201	1-781-867-21	VIBRATOR, CRYSTAL (27MHz)			

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		ENCODER BOARD			
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		FL BOARD			
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		< CAPACITOR >			
C839	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C840	1-126-795-11	ELECT	10uF	20%	50V
C841	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C842	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C843	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C845	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C846	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C847	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C848	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C849	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C850	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C851	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C852	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C853	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C854	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C855	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C856	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C857	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C858	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
		< CONNECTOR >			
CN803	1-568-828-11	CONNECTOR, FFC 9P			
		< FLUORESCENT INDICATOR >			
FL801	1-518-968-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC803	8-759-643-83	IC uPD16315GB-3BS			
		< TRANSISTOR >			
Q814	8-729-034-51	TRANSISTOR	KTC3875		
Q815	8-729-034-51	TRANSISTOR	KTC3875		
		< RESISTOR >			
R853	1-216-809-11	METAL CHIP	100	5%	1/10W
R854	1-216-809-11	METAL CHIP	100	5%	1/10W
R858	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-844-11	METAL CHIP	82K	5%	1/10W
R862	1-216-845-11	METAL CHIP	100K	5%	1/10W
R863	1-216-845-11	METAL CHIP	100K	5%	1/10W
R868	1-216-833-11	METAL CHIP	10K	5%	1/10W
R872	1-216-833-11	METAL CHIP	10K	5%	1/10W
R874	1-216-845-11	METAL CHIP	100K	5%	1/10W
R875	1-216-845-11	METAL CHIP	100K	5%	1/10W

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Ref. No.	Part No.	Description			Remark
	1-861-263-11	H/P BOARD			
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		< CAPACITOR >			
C800	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C801	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C802	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C803	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C804	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C806	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
		< CONNECTOR >			
CN804	1-785-331-11	PIN, CONNECTOR (LIGHT ANGLE) 5P			
		< DIODE >			
D800	8-719-988-61	DIODE 1SS355TE-17			
D801	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB800	1-500-284-21	INDUCTOR, FERRITE BEAD			
FB801	1-216-295-91	SHORT CHIP	0		
FB802	1-469-144-21	FERRITE, EMI (SMD) (2012)			
FB803	1-469-144-21	FERRITE, EMI (SMD) (2012)			
FB805	1-469-144-21	FERRITE, EMI (SMD) (2012)			
		< JACK >			
J800	1-566-891-21	JACK (PHONES)			
		< COIL >			
L800	1-410-387-11	INDUCTOR	33uH		
L801	1-410-387-11	INDUCTOR	33uH		
L802	1-469-144-21	FERRITE, EMI (SMD) (2012)			
L803	1-469-144-21	FERRITE, EMI (SMD) (2012)			
		< TRANSISTOR >			
Q800	8-729-920-31	TRANSISTOR	DTC343TK		
Q801	8-729-920-31	TRANSISTOR	DTC343TK		
Q803	8-729-920-31	TRANSISTOR	DTC343TK		
Q804	8-729-920-31	TRANSISTOR	DTC343TK		
		< RESISTOR >			
R800	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R801	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R802	1-216-805-11	METAL CHIP	47	5%	1/10W
R803	1-216-805-11	METAL CHIP	47	5%	1/10W
R805	1-216-805-11	METAL CHIP	47	5%	1/10W
R807	1-216-805-11	METAL CHIP	47	5%	1/10W

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	A-1060-648-A	IO BOARD, COMPLETE			
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		< CAPACITOR >			
C202	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C206	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C207	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C208	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C209	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C211	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C213	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C214	1-104-662-91	ELECT	22uF	20%	25V
C215	1-104-662-91	ELECT	22uF	20%	25V
C216	1-104-662-91	ELECT	22uF	20%	25V
C217	1-104-662-91	ELECT	22uF	20%	25V
C222	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C223	1-104-662-91	ELECT	22uF	20%	25V
C227	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C228	1-126-933-11	ELECT	100uF	20%	16V
C229	1-126-933-11	ELECT	100uF	20%	16V
C230	1-126-916-11	ELECT	1000uF	20%	6.3V
C231	1-126-916-11	ELECT	1000uF	20%	6.3V
C232	1-126-916-11	ELECT	1000uF	20%	6.3V
C233	1-104-662-91	ELECT	22uF	20%	25V
C235	1-104-662-91	ELECT	22uF	20%	25V
C238	1-104-662-91	ELECT	22uF	20%	25V
C239	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C240	1-126-964-11	ELECT	10uF	20%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V
C242	1-126-935-11	ELECT	470uF	20%	16V
C243	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C244	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C245	1-126-960-11	ELECT	1uF	20%	50V
C246	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C247	1-126-960-11	ELECT	1uF	20%	50V
C248	1-126-960-11	ELECT	1uF	20%	50V
C249	1-126-964-11	ELECT	10uF	20%	50V
C250	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C256	1-104-662-91	ELECT	22uF	20%	25V
C257	1-104-662-91	ELECT	22uF	20%	25V
C259	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C263	1-126-964-11	ELECT	10uF	20%	50V
C267	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C268	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C269	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C271	1-115-156-11	CERAMIC CHIP	1uF		10V
C277	1-126-934-11	ELECT	220uF	20%	16V
C278	1-104-662-91	ELECT	22uF	20%	25V
C279	1-104-662-91	ELECT	22uF	20%	25V
C280	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C281	1-115-156-11	CERAMIC CHIP	1uF		10V
C282	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C288	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
		< CONNECTOR >			
CN200	1-568-830-11	CONNECTOR, FFC 11P			
CN201	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P			
CN202	1-779-279-11	CONNECTOR, FFC (LIF (NON-ZIF)) 11P			
		< DIODE >			
D201	8-719-988-61	DIODE 1SS355TE-17			
D202	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC200	8-759-385-76	IC MC14052 BDR2			
IC201	6-705-602-01	IC MM1623BFBE			
IC203	8-759-710-97	IC NJM4565M-D			
		< JACK >			
J200	1-764-593-21	JACK 2P (VIDEO/SAT)			
J201	1-817-449-11	JACK, PIN 3P (COMPONENT VIDEO OUT)			
J203	1-694-920-11	TERMINAL BOARD (S TERMINAL+1P) (MONITOR OUT)			
		< COIL >			
L200	1-414-754-11	INDUCTOR	10uH		
L207	1-414-754-11	INDUCTOR	10uH		
L208	1-414-754-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q202	8-729-901-00	TRANSISTOR	DTC124EK		
Q203	8-729-901-00	TRANSISTOR	DTC124EK		
Q211	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q212	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R203	1-216-864-11	SHORT CHIP	0		
R204	1-216-864-11	SHORT CHIP	0		
R212	1-216-857-11	METAL CHIP	1M	5%	1/10W
R215	1-216-857-11	METAL CHIP	1M	5%	1/10W
R216	1-216-845-11	METAL CHIP	100K	5%	1/10W
R217	1-216-845-11	METAL CHIP	100K	5%	1/10W
R218	1-216-833-11	METAL CHIP	10K	5%	1/10W
R221	1-216-845-11	METAL CHIP	100K	5%	1/10W
R222	1-216-845-11	METAL CHIP	100K	5%	1/10W
R226	1-216-845-11	METAL CHIP	100K	5%	1/10W
R227	1-216-845-11	METAL CHIP	100K	5%	1/10W
R228	1-216-845-11	METAL CHIP	100K	5%	1/10W
R229	1-216-845-11	METAL CHIP	100K	5%	1/10W
R230	1-216-864-11	SHORT CHIP	0		
R231	1-218-285-11	METAL CHIP	75	5%	1/10W
R232	1-218-285-11	METAL CHIP	75	5%	1/10W
R233	1-218-285-11	METAL CHIP	75	5%	1/10W
R234	1-218-285-11	METAL CHIP	75	5%	1/10W
R235	1-216-833-11	METAL CHIP	10K	5%	1/10W
R237	1-218-285-11	METAL CHIP	75	5%	1/10W
R238	1-218-285-11	METAL CHIP	75	5%	1/10W
R244	1-216-833-11	METAL CHIP	10K	5%	1/10W
R248	1-216-833-11	METAL CHIP	10K	5%	1/10W
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W
R253	1-216-837-11	METAL CHIP	22K	5%	1/10W
R254	1-216-837-11	METAL CHIP	22K	5%	1/10W
R256	1-216-837-11	METAL CHIP	22K	5%	1/10W
R257	1-216-837-11	METAL CHIP	22K	5%	1/10W
R259	1-216-841-11	METAL CHIP	47K	5%	1/10W
R260	1-216-841-11	METAL CHIP	47K	5%	1/10W
R263	1-216-833-11	METAL CHIP	10K	5%	1/10W
R267	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R268	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R275	1-216-864-11	SHORT CHIP	0		
R277	1-216-864-11	SHORT CHIP	0		
R284	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R285	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R286	1-216-813-11	METAL CHIP	220	5%	1/10W
R290	1-216-849-11	METAL CHIP	220K	5%	1/10W
R292	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R294	1-216-849-11	METAL CHIP	220K	5%	1/10W
R295	1-216-813-11	METAL CHIP	220	5%	1/10W
R296	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R297	1-216-833-11	METAL CHIP	10K	5%	1/10W
R298	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R299	1-216-833-11	METAL CHIP	10K	5%	1/10W
R300	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-833-11	METAL CHIP	10K	5%	1/10W
R302	1-216-837-11	METAL CHIP	22K	5%	1/10W
R303	1-216-837-11	METAL CHIP	22K	5%	1/10W
R305	1-216-833-11	METAL CHIP	10K	5%	1/10W

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Ref. No.	Part No.	Description			Remark
	1-861-264-11	LF BOARD ********			
		< CAPACITOR >			
⚠C903	1-117-916-51	FILM	0.22uF	10%	275V
		< CONNECTOR >			
CN900	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
* CN901	1-564-321-21	PIN, CONNECTOR (3.96mm PITCH) 2P			
		< LINE FILTER >			
⚠LF901	1-456-082-11	COIL, LINE FILTER			

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Ref. No.	Part No.	Description			Remark
	A-1060-645-A	MAIN BOARD, COMPLETE (150)			
	A-1067-097-A	MAIN BOARD, COMPLETE (250) **************************			
		< CAPACITOR >			
C506	1-115-156-11	CERAMIC CHIP	1uF		10V
C507	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C508	1-115-156-11	CERAMIC CHIP	1uF		10V
C509	1-126-960-11	ELECT	1uF	20%	50V
C510	1-126-960-11	ELECT	1uF	20%	50V
C511	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C514	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C518	1-126-964-11	ELECT	10uF	20%	50V
C522	1-104-658-91	ELECT	100uF	20%	10V
C524	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C525	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C526	1-126-947-11	ELECT	47uF	20%	35V
C527	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C528	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C529	1-126-964-11	ELECT	10uF	20%	50V
C530	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C531	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C532	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C533	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C534	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C535	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C536	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C537	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C538	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C539	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C540	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C541	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C542	1-126-923-91	ELECT	220uF	20%	10V
C543	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C544	1-126-964-11	ELECT	10uF	20%	50V
C545	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C546	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C547	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C549	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C550	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C551	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C552	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C553	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C554	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C555	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C556	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C557	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C558	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C559	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C560	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C561	1-126-924-11	ELECT	330uF	20%	10V
C562	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C563	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C564	1-126-964-11	ELECT	10uF	20%	50V
C566	1-115-156-11	CERAMIC CHIP	1uF		10V
C568	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C569	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C570	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C571	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C572	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C573	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C574	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C575	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C576	1-126-964-11	ELECT	10uF	20%	50V
C577	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C578	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C579	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C581	1-104-905-11	CAPACITOR	0.22F		5.5V
C582	1-104-658-91	ELECT	100uF	20%	10V
C583	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C584	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C586	1-104-658-91	ELECT	100uF	20%	10V
C587	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C588	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C589	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C590	1-104-658-91	ELECT	100uF	20%	10V
C591	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C592	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C593	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C594	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C595	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C596	1-126-947-11	ELECT	47uF	20%	35V
C597	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C598	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C599	1-126-923-91	ELECT	220uF	20%	10V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN

Ref. No.	Part No.	Description	Remark
C601	1-126-947-11	ELECT 47uF 20%	35V
C602	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C603	1-104-658-91	ELECT 100uF 20%	10V
C604	1-110-501-11	CERAMIC CHIP 0.33uF 10%	16V
C605	1-126-947-11	ELECT 47uF 20%	35V
C606	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C607	1-126-947-11	ELECT 47uF 20%	35V
C608	1-162-953-11	CERAMIC CHIP 100PF 5%	50V
C614	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
		< CONNECTOR >	
CN502	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P	
CN503	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P	
CN504	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P	
CN505	1-784-370-31	CONNECTOR, FFC/FPC 11P	
CN507	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P	
CN509	1-778-691-11	CONNECTOR, FFC/FPC 19P	
CN510	1-785-466-11	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 7P	
		< DIODE >	
D501	8-719-988-61	DIODE 1SS355TE-17	
D502	8-719-988-61	DIODE 1SS355TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D504	8-719-988-61	DIODE 1SS355TE-17	
D505	8-719-988-61	DIODE 1SS355TE-17	
D506	8-719-988-61	DIODE 1SS355TE-17	
D507	8-719-988-61	DIODE 1SS355TE-17	
D509	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB500	1-414-813-11	FERRITE, EMI (SMD) (2012)	
FB501	1-216-295-91	SHORT CHIP 0	
FB509	1-469-121-21	FERRITE, EMI (SMD) (1608)	
		< IC >	
IC501	6-701-834-01	IC PCM1802DBR	
IC503	6-702-302-01	IC TK11133CSCL-G	
IC504	6-703-679-11	IC PT8300R-TP	
IC505	8-759-825-15	IC LC89056W-E	
IC506	6-705-843-01	IC CXD9720BQ	
IC507	6-704-037-01	IC IC61LV6416-15TG	
IC508	8-759-835-63	IC NJM2391DL1-26 (TE1)	
IC509	6-804-541-01	IC uPD703261YGF-S07-JBT-A	
IC510	6-703-679-11	IC PT8300R-TP	
IC511	6-701-680-01	IC PST3629NR	
IC512	8-759-473-95	IC uPC2905T-E1	
IC513	6-706-468-01	IC BA50BC0WFP-E2	
IC514	8-759-649-50	IC SN74AHC1GU04DCKR	
IC515	6-701-011-01	IC uPC2910T-E1	
IC516	6-706-469-01	IC BA80BC0WFP-E2	
		< COIL >	
L501	1-414-754-11	INDUCTOR 10uH	
L502	1-414-754-11	INDUCTOR 10uH	
L503	1-414-754-11	INDUCTOR 10uH	
L504	1-414-754-11	INDUCTOR 10uH	

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q503	6-550-363-01	TRANSISTOR 2SB1690KT146	
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q505	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q506	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q507	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q508	8-729-901-00	TRANSISTOR DTC124EK	
Q509	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R503	1-216-833-11	METAL CHIP 10K 5%	1/10W
R504	1-216-809-11	METAL CHIP 100 5%	1/10W
R505	1-216-809-11	METAL CHIP 100 5%	1/10W
R506	1-216-809-11	METAL CHIP 100 5%	1/10W
R507	1-216-809-11	METAL CHIP 100 5%	1/10W
R508	1-216-809-11	METAL CHIP 100 5%	1/10W
R509	1-216-864-11	SHORT CHIP 0	
R510	1-216-809-11	METAL CHIP 100 5%	1/10W
R511	1-216-809-11	METAL CHIP 100 5%	1/10W
R512	1-216-809-11	METAL CHIP 100 5%	1/10W
R515	1-216-809-11	METAL CHIP 100 5%	1/10W
R516	1-216-809-11	METAL CHIP 100 5%	1/10W
R517	1-216-809-11	METAL CHIP 100 5%	1/10W
R518	1-216-809-11	METAL CHIP 100 5%	1/10W
R519	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R520	1-216-809-11	METAL CHIP 100 5%	1/10W
R521	1-216-833-11	METAL CHIP 10K 5%	1/10W
R522	1-216-809-11	METAL CHIP 100 5%	1/10W
R523	1-216-833-11	METAL CHIP 10K 5%	1/10W
R525	1-216-809-11	METAL CHIP 100 5%	1/10W
R526	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R527	1-216-809-11	METAL CHIP 100 5%	1/10W
R528	1-216-809-11	METAL CHIP 100 5%	1/10W
R529	1-216-809-11	METAL CHIP 100 5%	1/10W
R531	1-216-857-11	METAL CHIP 1M 5%	1/10W
R532	1-216-821-11	METAL CHIP 1K 5%	1/10W
R533	1-216-809-11	METAL CHIP 100 5%	1/10W
R537	1-216-809-11	METAL CHIP 100 5%	1/10W
R540	1-216-809-11	METAL CHIP 100 5%	1/10W
R541	1-216-809-11	METAL CHIP 100 5%	1/10W
R542	1-216-809-11	METAL CHIP 100 5%	1/10W
R543	1-216-809-11	METAL CHIP 100 5%	1/10W
R544	1-216-809-11	METAL CHIP 100 5%	1/10W
R545	1-216-809-11	METAL CHIP 100 5%	1/10W
R546	1-216-809-11	METAL CHIP 100 5%	1/10W
R547	1-216-809-11	METAL CHIP 100 5%	1/10W
R548	1-216-809-11	METAL CHIP 100 5%	1/10W
R549	1-216-809-11	METAL CHIP 100 5%	1/10W
R551	1-216-821-11	METAL CHIP 1K 5%	1/10W
R552	1-216-809-11	METAL CHIP 100 5%	1/10W
R553	1-216-809-11	METAL CHIP 100 5%	1/10W
R554	1-216-809-11	METAL CHIP 100 5%	1/10W
R555	1-216-830-11	METAL CHIP 5.6K 5%	1/10W
R556	1-216-809-11	METAL CHIP 100 5%	1/10W
R557	1-216-829-11	METAL CHIP 4.7K 5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R558	1-216-839-11	METAL CHIP	33K	5%	1/10W
R559	1-216-821-11	METAL CHIP	1K	5%	1/10W
R560	1-216-809-11	METAL CHIP	100	5%	1/10W
R561	1-216-809-11	METAL CHIP	100	5%	1/10W
R562	1-216-821-11	METAL CHIP	1K	5%	1/10W
R563	1-216-809-11	METAL CHIP	100	5%	1/10W
R564	1-216-809-11	METAL CHIP	100	5%	1/10W
R565	1-216-809-11	METAL CHIP	100	5%	1/10W
R566	1-216-833-11	METAL CHIP	10K	5%	1/10W
R567	1-216-809-11	METAL CHIP	100	5%	1/10W
R568	1-216-809-11	METAL CHIP	100	5%	1/10W
R569	1-216-857-11	METAL CHIP	1M	5%	1/10W
R572	1-216-809-11	METAL CHIP	100	5%	1/10W
R573	1-216-809-11	METAL CHIP	100	5%	1/10W
R574	1-216-809-11	METAL CHIP	100	5%	1/10W
R575	1-216-809-11	METAL CHIP	100	5%	1/10W
R576	1-216-821-11	METAL CHIP	1K	5%	1/10W
R578	1-216-809-11	METAL CHIP	100	5%	1/10W
R579	1-216-809-11	METAL CHIP	100	5%	1/10W
R580	1-216-833-11	METAL CHIP	10K	5%	1/10W
R581	1-216-809-11	METAL CHIP	100	5%	1/10W
R582	1-216-809-11	METAL CHIP	100	5%	1/10W
R583	1-216-809-11	METAL CHIP	100	5%	1/10W
R585	1-216-809-11	METAL CHIP	100	5%	1/10W
R586	1-216-809-11	METAL CHIP	100	5%	1/10W
R587	1-216-809-11	METAL CHIP	100	5%	1/10W
R588	1-216-809-11	METAL CHIP	100	5%	1/10W
R589	1-216-821-11	METAL CHIP	1K	5%	1/10W
R590	1-216-809-11	METAL CHIP	100	5%	1/10W
R591	1-216-809-11	METAL CHIP	100	5%	1/10W
R594	1-216-809-11	METAL CHIP	100	5%	1/10W
R595	1-216-809-11	METAL CHIP	100	5%	1/10W
R596	1-216-833-11	METAL CHIP	10K	5%	1/10W
R597	1-216-809-11	METAL CHIP	100	5%	1/10W
R598	1-216-833-11	METAL CHIP	10K	5%	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W
R608	1-216-809-11	METAL CHIP	100	5%	1/10W
R609	1-216-864-11	SHORT CHIP	0		
R611	1-216-841-11	METAL CHIP	47K	5%	1/10W
R612	1-216-833-11	METAL CHIP	10K	5%	1/10W
R613	1-216-809-11	METAL CHIP	100	5%	1/10W
R614	1-216-833-11	METAL CHIP	10K	5%	1/10W
R615	1-216-809-11	METAL CHIP	100	5%	1/10W
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W
R617	1-216-809-11	METAL CHIP	100	5%	1/10W
R618	1-216-833-11	METAL CHIP	10K	5%	1/10W
R619	1-216-813-11	METAL CHIP	220	5%	1/10W
R620	1-216-809-11	METAL CHIP	100	5%	1/10W
R621	1-216-845-11	METAL CHIP	100K	5%	1/10W
R622	1-216-845-11	METAL CHIP	100K	5%	1/10W
R623	1-216-821-11	METAL CHIP	1K	5%	1/10W
R624	1-216-833-11	METAL CHIP	10K	5%	1/10W
R625	1-216-809-11	METAL CHIP	100	5%	1/10W
R626	1-216-821-11	METAL CHIP	1K	5%	1/10W
R627	1-216-821-11	METAL CHIP	1K	5%	1/10W
R628	1-216-821-11	METAL CHIP	1K	5%	1/10W
R631	1-216-821-11	METAL CHIP	1K	5%	1/10W
R639	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R640	1-216-833-11	METAL CHIP	10K	5%	1/10W
R642	1-216-841-11	METAL CHIP	47K	5%	1/10W
R648	1-216-841-11	METAL CHIP	47K	5%	1/10W
R650	1-216-841-11	METAL CHIP	47K	5%	1/10W
R651	1-216-853-11	METAL CHIP	470K	5%	1/10W
R652	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R653	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R654	1-216-821-11	METAL CHIP	1K	5%	1/10W
R656	1-216-813-11	METAL CHIP	220	5%	1/10W
R657	1-216-841-11	METAL CHIP	47K	5%	1/10W
R658	1-216-809-11	METAL CHIP	100	5%	1/10W
R659	1-216-845-11	METAL CHIP	100K	5%	1/10W
R660	1-216-809-11	METAL CHIP	100	5%	1/10W
R661	1-216-809-11	METAL CHIP	100	5%	1/10W
R662	1-216-841-11	METAL CHIP	47K	5%	1/10W
R663	1-216-809-11	METAL CHIP	100	5%	1/10W
R664	1-216-813-11	METAL CHIP	220	5%	1/10W
R665	1-216-813-11	METAL CHIP	220	5%	1/10W
R666	1-216-809-11	METAL CHIP	100	5%	1/10W
R667	1-216-809-11	METAL CHIP	100	5%	1/10W
R668	1-216-809-11	METAL CHIP	100	5%	1/10W
R669	1-216-809-11	METAL CHIP	100	5%	1/10W
R670	1-216-809-11	METAL CHIP	100	5%	1/10W
R671	1-216-809-11	METAL CHIP	100	5%	1/10W
R672	1-216-809-11	METAL CHIP	100	5%	1/10W
R673	1-216-833-11	METAL CHIP	10K	5%	1/10W
R674	1-216-864-11	SHORT CHIP	0		
R675	1-216-809-11	METAL CHIP	100	5%	1/10W
R676	1-216-833-11	METAL CHIP	10K	5%	1/10W
R678	1-216-833-11	METAL CHIP	10K	5%	1/10W
R679	1-216-809-11	METAL CHIP	100	5%	1/10W
R680	1-216-809-11	METAL CHIP	100	5%	1/10W
R681	1-216-833-11	METAL CHIP	10K	5%	1/10W
R682	1-216-813-11	METAL CHIP	220	5%	1/10W
R683	1-216-809-11	METAL CHIP	100	5%	1/10W
R684	1-216-864-11	SHORT CHIP	0		
R686	1-216-813-11	METAL CHIP	220	5%	1/10W
R703	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R704	1-216-864-11	SHORT CHIP	0		
R706	1-216-809-11	METAL CHIP	100	5%	1/10W
R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R708	1-216-809-11	METAL CHIP	100	5%	1/10W
R714	1-216-809-11	METAL CHIP	100	5%	1/10W
R715	1-216-809-11	METAL CHIP	100	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-809-11	METAL CHIP	100	5%	1/10W
R718	1-216-809-11	METAL CHIP	100	5%	1/10W
R723	1-216-821-11	METAL CHIP	1K	5%	1/10W
R741	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R742	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R743	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (250)
R744	1-216-837-11	METAL CHIP	22K	5%	1/10W
R753	1-216-833-11	METAL CHIP	10K	5%	1/10W (150)
R754	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description	Remark
		< COMPOSITION CIRCUIT BLOCK >	
RB501	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB502	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB503	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB504	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB505	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB506	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB507	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB508	1-233-411-11	RES, CHIP NETWORK 220 (3216)	
RB509	1-233-411-11	RES, CHIP NETWORK 220 (3216)	
RB510	1-233-411-11	RES, CHIP NETWORK 220 (3216)	
RB901	1-236-908-11	RES, CHIP NETWORK 10K	
RB902	1-236-908-11	RES, CHIP NETWORK 10K	
RB903	1-236-908-11	RES, CHIP NETWORK 10K	
RB904	1-236-908-11	RES, CHIP NETWORK 10K	
		< VIBRATOR >	
X500	1-795-843-11	VIBRATOR, CRYSTAL (12.288MHz)	
X501	1-813-325-11	VIBRATOR, CRYSTAL (13.90MHz)	
X502	1-795-058-21	VIBRATOR, CERAMIC (5MHz)	

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MOTOR BOARD
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Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S761	1-786-704-11	SWITCH, LEVER (SUB TRAY OUT)	

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A-4752-728-A PANEL BOARD, COMPLETE
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Ref. No.	Part No.	Description	Remark
	4-255-281-01	LED HOLDER	
		< CAPACITOR >	
C817	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C818	1-126-964-11	ELECT 10uF 20%	50V
C819	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C821	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C823	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C826	1-124-234-00	ELECT 22uF 20%	10V
C830	1-163-037-11	CERAMIC CHIP 0.022uF 10%	50V
C835	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C836	1-119-943-91	ELECT 47uF 20%	50V
C837	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C860	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C861	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C862	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
		< CONNECTOR >	
CN800	1-779-556-21	CONNECTOR, FFC (LIF (NON-ZIF)) 19P	
CN801	1-568-828-11	CONNECTOR, FFC 9P	
		< DIODE >	
D803	6-500-522-01	DIODE 10EDB40-TA1B2	
D806	8-719-056-13	DIODE SML79423C-TP15 (DISC 1)	
D807	8-719-056-13	DIODE SML79423C-TP15 (DISC 2)	
D808	8-719-056-13	DIODE SML79423C-TP15 (DISC 3)	
D809	8-719-056-13	DIODE SML79423C-TP15 (DISC 4)	

Ref. No.	Part No.	Description	Remark
D810	8-719-988-61	DIODE 1SS355TE-17	
D811	8-719-988-61	DIODE 1SS355TE-17	
D812	8-719-056-13	DIODE SML79423C-TP15 (DISC 5)	
D813	8-719-988-61	DIODE 1SS355TE-17	
D814	8-719-988-61	DIODE 1SS355TE-17	
D815	8-719-069-56	DIODE UDZSTE-176.2B	
D816	6-500-940-01	DIODE SEL6E14C-STP5 (BACK LIGHT)	
D817	6-500-940-01	DIODE SEL6E14C-STP5 (BACK LIGHT)	
D818	6-500-940-01	DIODE SEL6E14C-STP5 (BACK LIGHT)	
D819	6-500-940-01	DIODE SEL6E14C-STP5 (BACK LIGHT)	
D820	6-500-940-01	DIODE SEL6E14C-STP5 (BACK LIGHT)	
D821	6-500-940-01	DIODE SEL6E14C-STP5 (BACK LIGHT)	
		< FERRITE BEAD >	
FB804	1-216-864-11	SHORT CHIP 0	
		< IC >	
IC802	6-701-888-01	IC BU2152FS	
		< COIL >	
L804	1-410-671-31	INDUCTOR 47uH	
L806	1-469-144-21	FERRITE, EMI (SMD) (2012)	
		< TRANSISTOR >	
Q806	8-729-034-51	TRANSISTOR KTC3875	
Q807	8-729-034-51	TRANSISTOR KTC3875	
Q808	6-550-065-01	TRANSISTOR CPH5504-TL-E	
Q820	8-729-038-68	TRANSISTOR KRC103S	
Q821	8-729-038-68	TRANSISTOR KRC103S	
Q822	8-729-038-68	TRANSISTOR KRC103S	
		< RESISTOR >	
R812	1-216-864-11	SHORT CHIP 0	
R817	1-216-821-11	METAL CHIP 1K 5%	1/10W
R818	1-216-833-11	METAL CHIP 10K 5%	1/10W
R821	1-216-828-11	METAL CHIP 3.9K 5%	1/10W
R823	1-216-841-11	METAL CHIP 47K 5%	1/10W
R824	1-216-821-11	METAL CHIP 1K 5%	1/10W
R825	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R826	1-216-812-11	METAL CHIP 180 5%	1/10W
R827	1-216-812-11	METAL CHIP 180 5%	1/10W
R828	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R829	1-216-812-11	METAL CHIP 180 5%	1/10W
R830	1-216-812-11	METAL CHIP 180 5%	1/10W
R831	1-216-812-11	METAL CHIP 180 5%	1/10W
R832	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R833	1-216-812-11	METAL CHIP 180 5%	1/10W
R834	1-216-812-11	METAL CHIP 180 5%	1/10W
R835	1-216-812-11	METAL CHIP 180 5%	1/10W
R836	1-216-833-11	METAL CHIP 10K 5%	1/10W
R837	1-216-812-11	METAL CHIP 180 5%	1/10W
R838	1-216-812-11	METAL CHIP 180 5%	1/10W
R839	1-216-839-11	METAL CHIP 33K 5%	1/10W
R840	1-216-809-11	METAL CHIP 100 5%	1/10W
R841	1-216-809-11	METAL CHIP 100 5%	1/10W
R842	1-216-809-11	METAL CHIP 100 5%	1/10W
R843	1-216-809-11	METAL CHIP 100 5%	1/10W

Ref. No.	Part No.	Description			Remark
R844	1-216-837-11	METAL CHIP	22K	5%	1/10W
R845	1-216-821-11	METAL CHIP	1K	5%	1/10W
R846	1-216-809-11	METAL CHIP	100	5%	1/10W
R847	1-216-833-11	METAL CHIP	10K	5%	1/10W
R848	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R849	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R850	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R851	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R852	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R855	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R856	1-216-837-11	METAL CHIP	22K	5%	1/10W
R859	1-216-821-11	METAL CHIP	1K	5%	1/10W
R861	1-216-864-11	SHORT CHIP	0		
R866	1-216-815-11	METAL CHIP	330	5%	1/10W
R869	1-216-815-11	METAL CHIP	330	5%	1/10W
R873	1-216-815-11	METAL CHIP	330	5%	1/10W
		< SWITCH >			
S801	1-771-608-21	SWITCH, TACTILE (⏏ (DISC 1))			
S802	1-771-608-21	SWITCH, TACTILE (⏏ (DISC 2))			
S803	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S804	1-771-608-21	SWITCH, TACTILE (DISC 1)			
S805	1-771-608-21	SWITCH, TACTILE (DISC 2)			
S806	1-771-608-21	SWITCH, TACTILE (DISC 3)			
S807	1-762-875-21	SWITCH, KEYBOARD (VOLUME -)			
S808	1-762-875-21	SWITCH, KEYBOARD (⏭ PRESET +)			
S809	1-762-875-21	SWITCH, KEYBOARD (▷)			
S810	1-762-875-21	SWITCH, KEYBOARD (■)			
S811	1-771-608-21	SWITCH, TACTILE (DISC 4)			
S812	1-771-608-21	SWITCH, TACTILE (DISC 5)			
S813	1-762-875-21	SWITCH, KEYBOARD (⏮ PRESET -)			
S814	1-771-608-21	SWITCH, TACTILE (⏏ (DISC 5))			
S815	1-762-875-21	SWITCH, KEYBOARD (VOLUME +)			
S816	1-771-608-21	SWITCH, TACTILE (⏏ (DISC 4))			
S817	1-762-875-21	SWITCH, KEYBOARD (❚❚)			
S818	1-771-608-21	SWITCH, TACTILE (⏏ (DISC 3))			
		< TRANSFORMER >			
T801	1-443-172-11	TRANSFORMER, DC-DC CONVERTER			

****

1-861-265-11 POWER SW BOARD
****

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C805	1-126-795-11	ELECT	10uF	20%	50V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN805	1-785-331-11	PIN, CONNECTOR (LIGHT ANGLE) 5P			
		< DIODE >			
D802	6-500-809-01	DIODE SELU5223C-STP15 (STAND BY)			
		< IC >			
IC800	8-759-826-34	IC NJL74H400A (R)			
		< RESISTOR >			
R804	1-216-805-11	METAL CHIP	47	5%	1/10W
R811	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R814	1-216-805-11	METAL CHIP	47	5%	1/10W
		< SWITCH >			
S800	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			

****

SENSOR BOARD
****

Ref. No.	Part No.	Description			Remark
		< IC >			
IC751	8-759-989-76	IC RPR-359F			

****

SPK BOARD
****

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C340	1-162-294-31	CERAMIC	0.001uF	10%	50V
C341	1-162-294-31	CERAMIC	0.001uF	10%	50V
C342	1-162-294-31	CERAMIC	0.001uF	10%	50V
C343	1-162-294-31	CERAMIC	0.001uF	10%	50V
C481	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C482	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C483	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C484	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C485	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C486	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C487	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C488	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C489	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C490	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C491	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C492	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
* CN309	1-564-241-11	PIN, CONNECTOR (3.96mm PITCH) 4P			
CN311	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
CN312	1-691-766-21	PLUG (MICRO CONNECTOR) 4P			
		< TERMINAL >			
GP306	1-537-770-21	TERMINAL BOARD, GROUND			
GP307	1-537-770-21	TERMINAL BOARD, GROUND			
TB301	1-694-998-21	TERMINAL BOARD (SPEAKER)			

****

SW (1) BOARD
****

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S721	1-786-084-11	SWITCH, DETECTION (MAIN TRAY IN/OUT)			

****

Ref. No.	Part No.	Description			Remark
		SW (2) BOARD ************			
		< SWITCH >			
S731	1-786-382-11	SWITCH, PUSH (1 KEY) (SUB TRAY IN)			

****

Ref. No.	Part No.	Description			Remark
	A-4750-232-A	TRANSLATION BOARD, COMPLETE ****************************			
		< CAPACITOR >			
C701	1-126-786-11	ELECT	47uF	20%	16V
C702	1-126-791-11	ELECT	10uF	20%	35V
C761	1-162-306-11	CERAMIC	0.01uF	20%	16V
C762	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
CN701	1-779-558-21	CONNECTOR, FFC (LIF (NON-ZIF)) 21P			
		< DIODE >			
D701	8-719-921-40	DIODE MTZJ-4.7C			
D711	8-719-982-10	DIODE MTZJ-4.3A			
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
IC711	8-759-598-69	IC BA6956AN			
		< TRANSISTOR >			
Q751	8-729-119-78	TRANSISTOR	2SC2785-HFE		
		< RESISTOR >			
R701	1-249-415-11	CARBON	680	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
R711	1-249-415-11	CARBON	680	5%	1/4W
R712	1-247-807-31	CARBON	100	5%	1/4W
R751	1-247-806-11	CARBON	91	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-249-430-11	CARBON	12K	5%	1/4W
R755	1-249-429-11	CARBON	10K	5%	1/4W

****

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS **************	
5	1-763-861-12	FAN, DC	
6	1-828-962-11	WIRE (FLAT TYPE) (11 CORE)	
57	1-962-870-11	WIRE (FLAT TYPE) (9 CORE)	
58	1-829-211-11	WIRE (FLAT TYPE) (19 CORE)	
103	1-828-954-11	WIRE (FLAT TYPE) (9 CORE)	
⚠105	1-783-531-72	CORD, POWER (US, CND)	
⚠105	1-696-169-51	CORD, POWER (E41)	
⚠105	1-696-847-22	CORD, POWER (AUS)	
⚠105	1-751-520-21	CORD, POWER (EA)	
⚠105	1-775-789-91	CORD, POWER (MX)	
⚠105	1-827-597-41	CORD, POWER (TW)	
⚠105	1-769-079-32	CORD, POWER (KR)	
⚠108	1-468-836-13	REGULATOR, SWITCHING	
112	1-828-411-11	WIRE (FLAT TYPE) (29 CORE)	
114	1-828-371-11	WIRE (FLAT TYPE) (21 CORE)	
115	1-828-349-11	WIRE (FLAT TYPE) (17 CORE)	
116	1-829-212-11	WIRE (FLAT TYPE) (15 CORE)	
117	1-962-869-11	WIRE (FLAT TYPE) (5 CORE)	
118	1-828-954-11	WIRE (FLAT TYPE) (9 CORE)	
⚠302	8-820-255-02	OPTICAL PICK-UP KHM-310AAB/C2RP	
305	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)	
M761	A-4713-174-A	MOTOR (81) ASSY (LD/ST MOTOR)	
M762	A-4713-174-A	MOTOR (81) ASSY (BU U/D MOTOR)	
S771	1-478-552-11	ENCODER, ROTARY (MD)	
S781	1-478-551-11	ENCODER, ROTARY (ST U/D ENCODER)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MEMO

HCD-BC150/BC250

SONY®

US Model
Canadian Model
E Model
HCD-BC150/BC250
Australian Model
HCD-BC150

SERVICE MANUAL

Ver 1.3 2004.08

SUPPLEMENT-3

Subject: SERVICING NOTE, DISASSEMBLY and BLOCK DIAGRAM

9-877-956-83

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SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output several times.

NOTE OF REPLACING THE DMB07 BOARD

When replacing the DMB07 board, since the adjustment value is not set up correctly, “Drive Auto Adjustment” can’t be performed. In this case, initialize Memory in the following procedures.

Procedure:

1. Set the test mode. (See page 3 of Supplement-1)
2. Press the 2 key of the remote commander, and set the “DRIVE MANUAL OPERATION”. (See page 5 of Supplement-1)
3. Press the 6 key of the remote commander, and set the “2-6, Memory Check”. (See page 7 of Supplement-1)
4. Press the CLEAR key of the remote commander, and initialize Memory.

DISC SLOT LOCK

The disc slot lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure :

1. Press the I/⏻ button to turn the set on.
2. Press the FUNCTION button to set DVD function.
3. Insert a disc.
4. Press the ■ stick and the ⏏ (DISC1) button simultaneously for five seconds.
5. The message “LOCKED” is displayed and the slot is locked.

Releasing Procedure :

1. Press the ■ stick and the ⏏ (DISC1) button simultaneously for five seconds again.
2. The message “UNLOCKED” is displayed and the slot is unlocked.

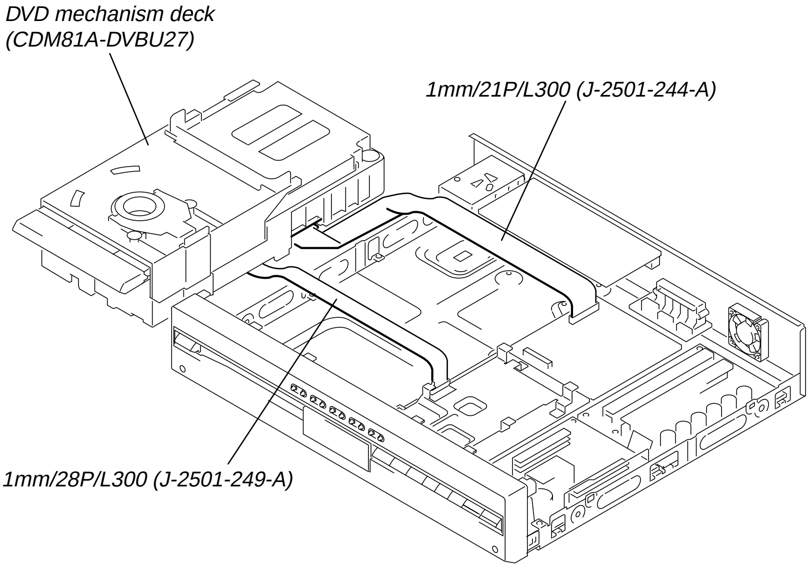
Note: When “LOCKED” is displayed, the slot lock is not released by turning power on/off with the I/⏻ button.

Note 1: Regarding the notification symbol “R”
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander (RM-SS250 supplied with the product). When a specific operation requires use of the operating buttons of the remote commander (RM-SS250), “R” is added to the specific operating procedure in this manual.
Example MENU/NO “R” The MENU/NO button of remote commander.

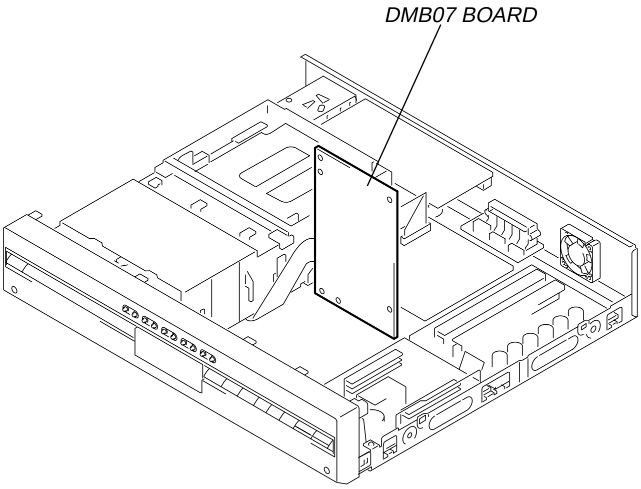
Note 2: Incorrect operations may be performed if the test mode ia not entered properly.
In this case, press the I/⏻ button to turn the power off, and retry to enter the test mode.

Note 3: If the disc tray does not open and the message “LOCKED” appears, press the ■ stick and the ⏏ (DISC1) button simultaneously for 5 seconds or longer.
Then remove your fingers from the above stick and the button.
The message “UNLOCKED” appears for 2 seconds and the disc tray opens.

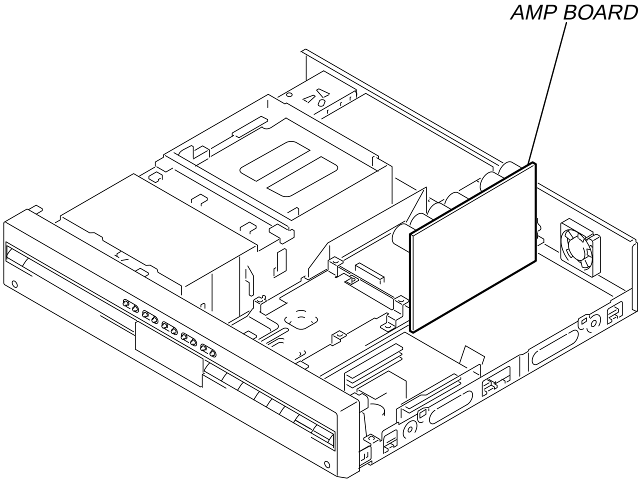
- **SERVICING POSITION-1 (DVD MECHANISM DECK)**



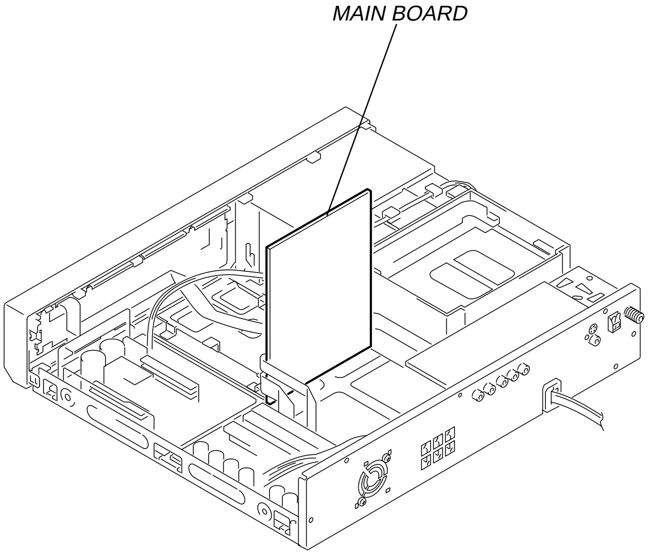
- **SERVICING POSITION-2 (DMB07 BOARD)**


DMB07 BOARD

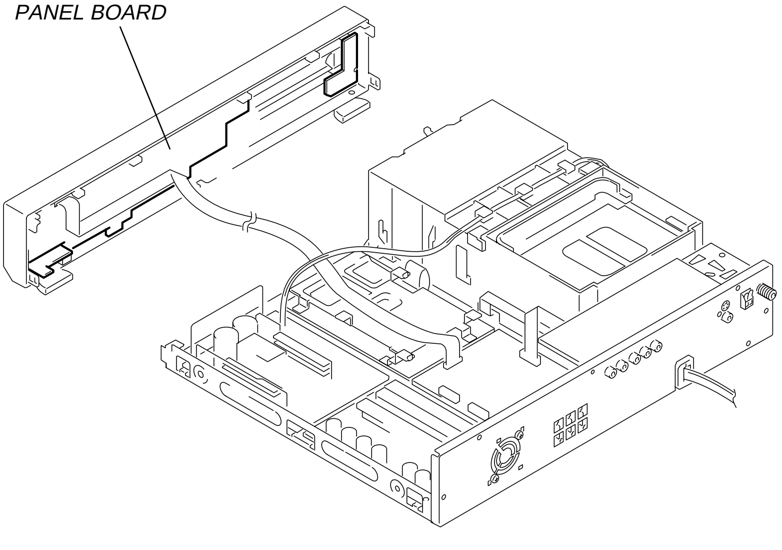
- **SERVICING POSITION-3 (AMP BOARD)**



- **SERVICING POSITION-4 (MAIN BOARD)**



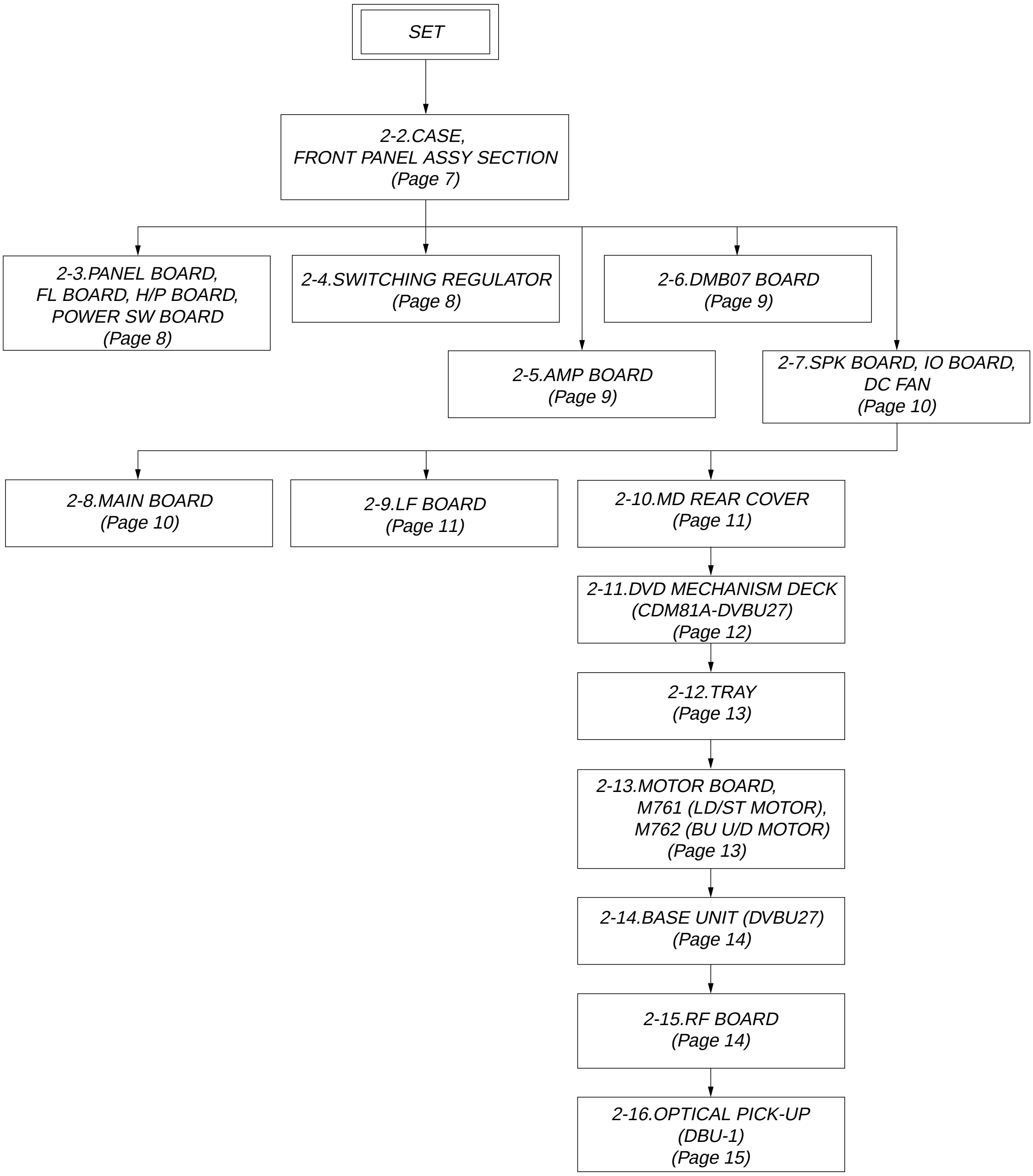
- **SERVICING POSITION-5 (PANELBOARD)**


PANEL BOARD

SECTION 2
DISASSEMBLY

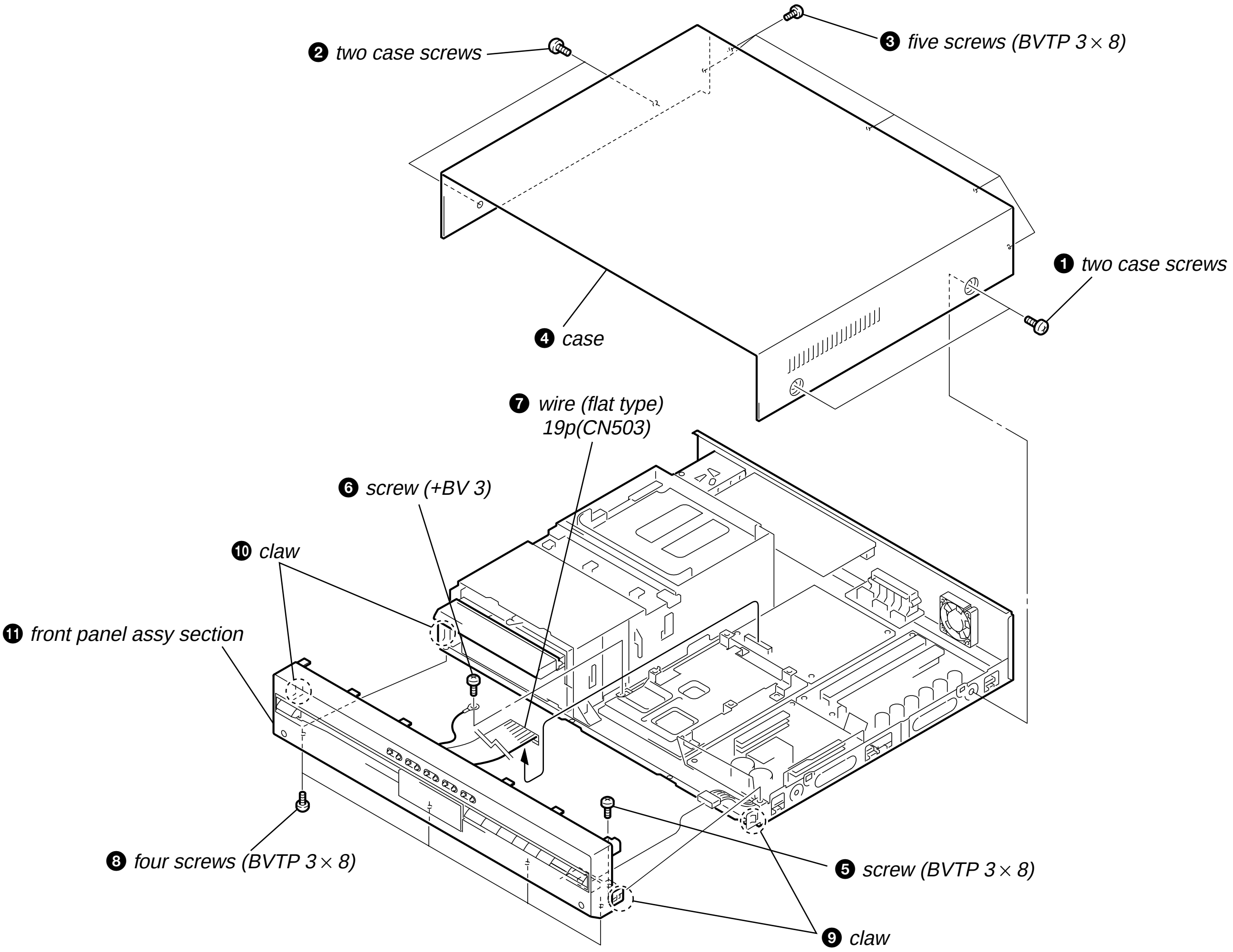
2-1. DISASSEMBLY FLOW

- This set can be disassembled in the order shown below.

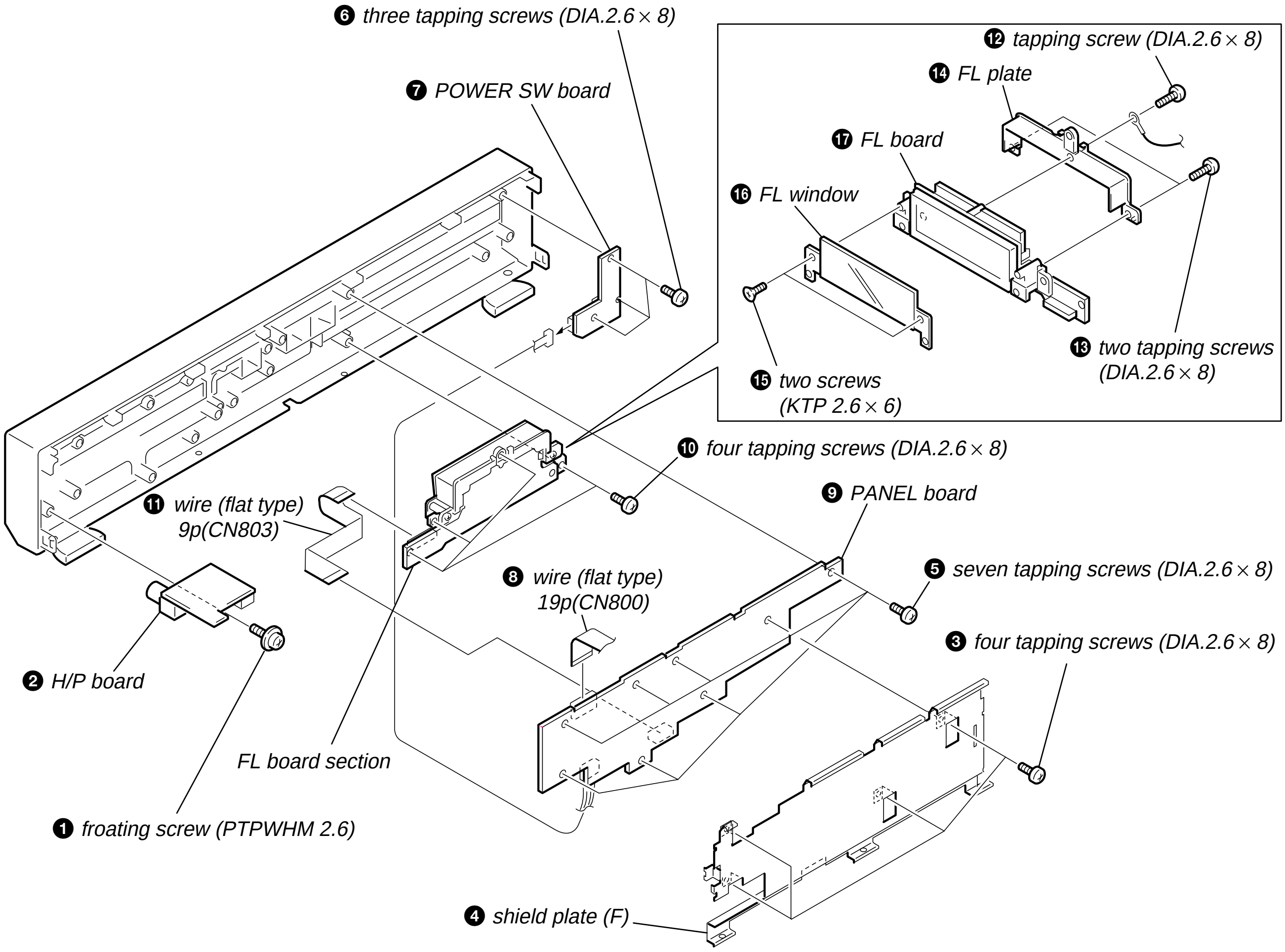

SET
2-2.CASE, FRONT PANEL ASSY SECTION (Page 7)
2-3.PANEL BOARD, FL BOARD, H/P BOARD, POWER SW BOARD (Page 8)
2-4.SWITCHING REGULATOR (Page 8)
2-6.DMB07 BOARD (Page 9)
2-5.AMP BOARD (Page 9)
2-7.SPK BOARD, IO BOARD, DC FAN (Page 10)
2-8.MAIN BOARD (Page 10)
2-9.LF BOARD (Page 11)
2-10.MD REAR COVER (Page 11)
2-11.DVD MECHANISM DECK (CDM81A-DVBU27) (Page 12)
2-12.TRAY (Page 13)
2-13.MOTOR BOARD, M761 (LD/ST MOTOR), M762 (BU U/D MOTOR) (Page 13)
2-14.BASE UNIT (DVBU27) (Page 14)
2-15.RF BOARD (Page 14)
2-16.OPTICAL PICK-UP (DBU-1) (Page 15)

Note: Follow the disassembly procedure in the numerical order given.

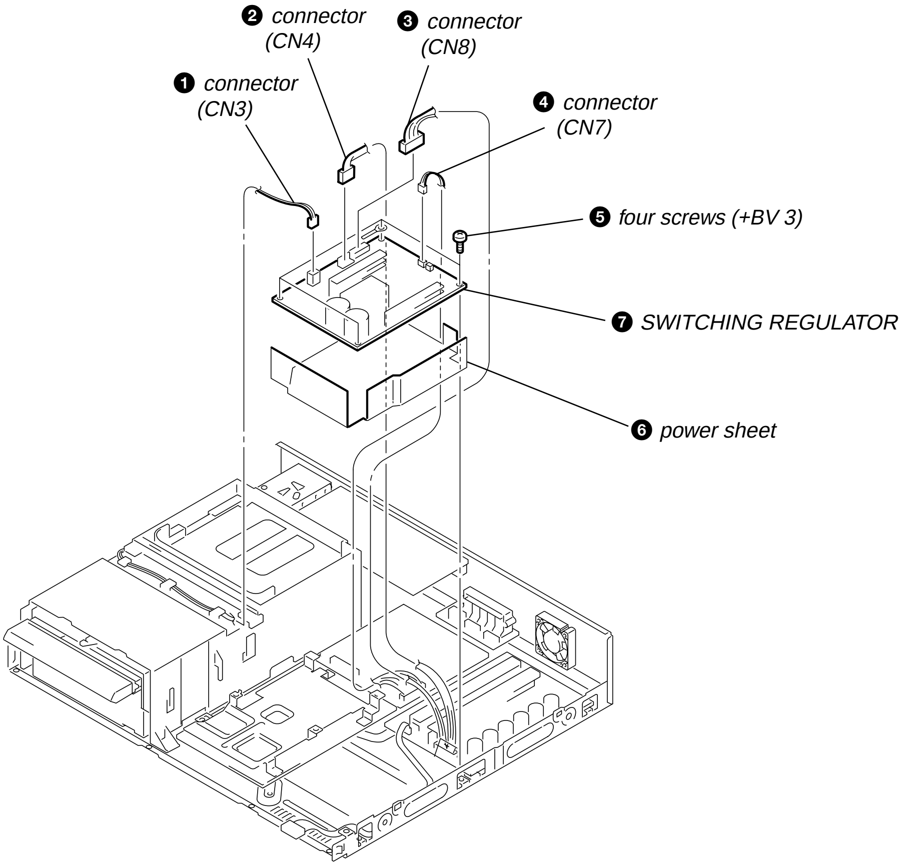
2-2. CASE, FRONT PANEL ASSY SECTION


❷ two case screws
❸ five screws (BVTP 3 × 8)
❶ two case screws
❹ case
❼ wire (flat type) 19p(CN503)
❻ screw (+BV 3)
❿ claw
⓫ front panel assy section
❽ four screws (BVTP 3 × 8)
❺ screw (BVTP 3 × 8)
❾ claw

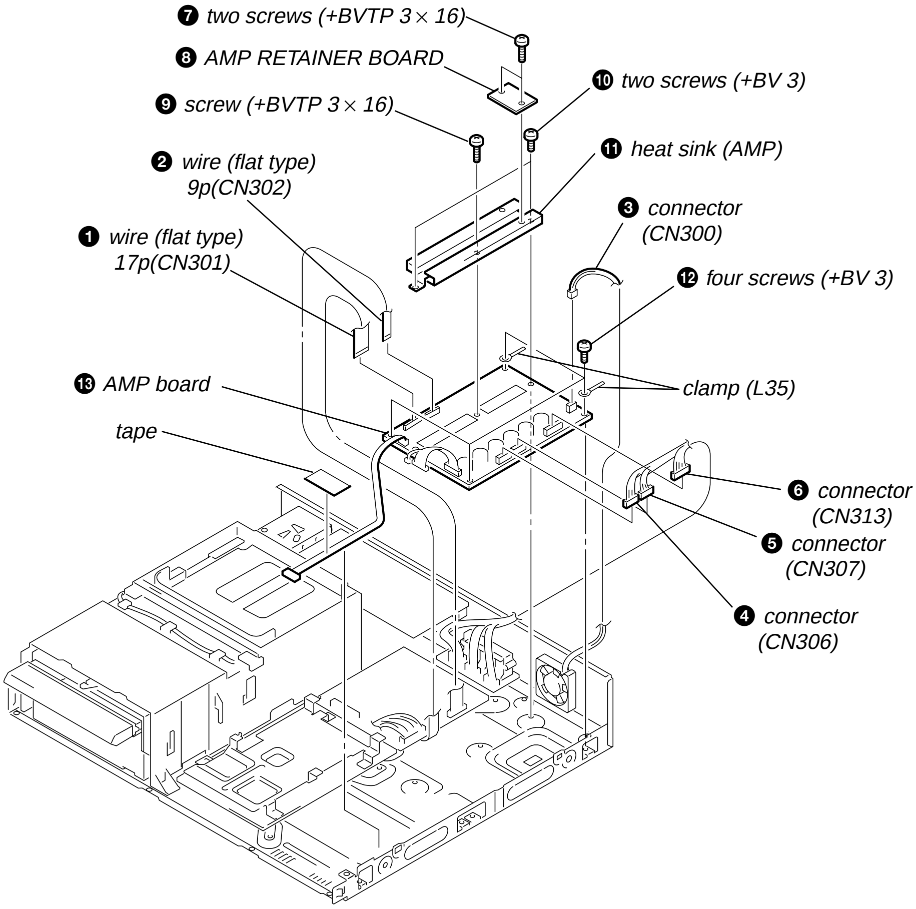
2-3. PANEL BOARD, FL BOARD, H/P BOARD, POWER SW BOARD


❻ three tapping screws (DIA.2.6 × 8)
⓬ tapping screw (DIA.2.6 × 8)
⓮ FL plate
❼ POWER SW board
⓱ FL board
⓰ FL window
⓭ two tapping screws (DIA.2.6 × 8)
⓯ two screws (KTP 2.6 × 6)
❿ four tapping screws (DIA.2.6 × 8)
❾ PANEL board
⓫ wire (flat type) 9p(CN803)
❺ seven tapping screws (DIA.2.6 × 8)
❽ wire (flat type) 19p(CN800)
❸ four tapping screws (DIA.2.6 × 8)
❷ H/P board
FL board section
❶ froating screw (PTPWHM 2.6)
❹ shield plate (F)

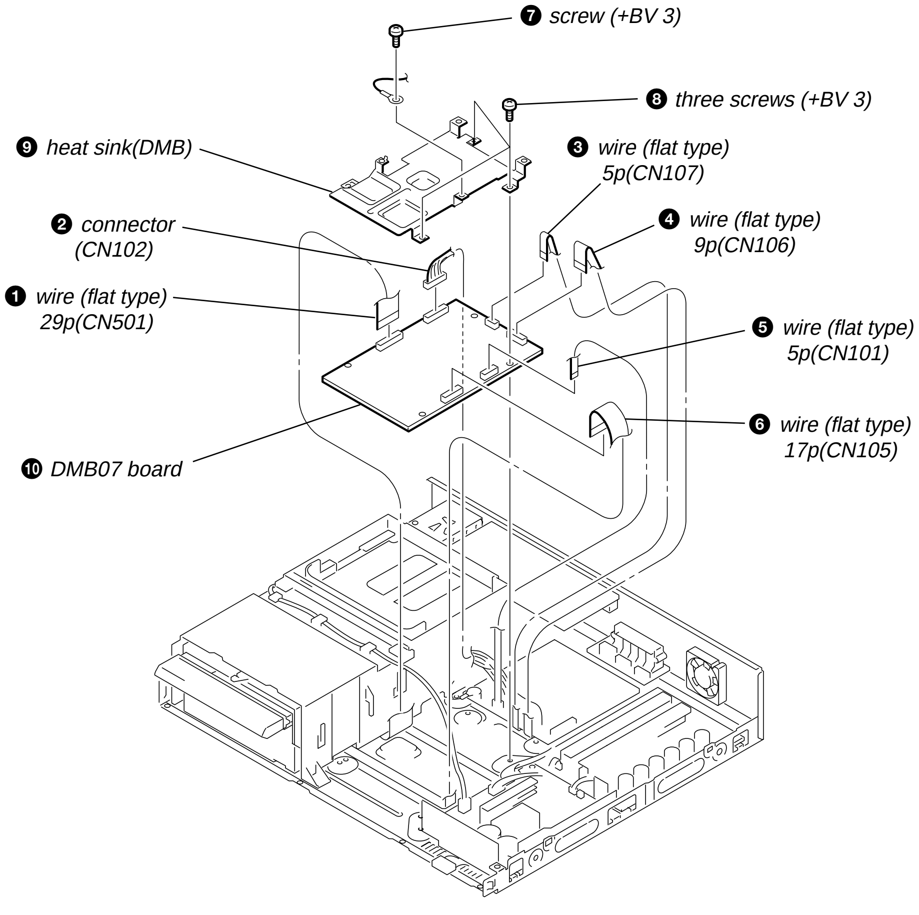
2-4. SWITCHING REGULATOR


❷ connector (CN4)
❸ connector (CN8)
❶ connector (CN3)
❹ connector (CN7)
❺ four screws (+BV 3)
❼ SWITCHING REGULATOR
❻ power sheet

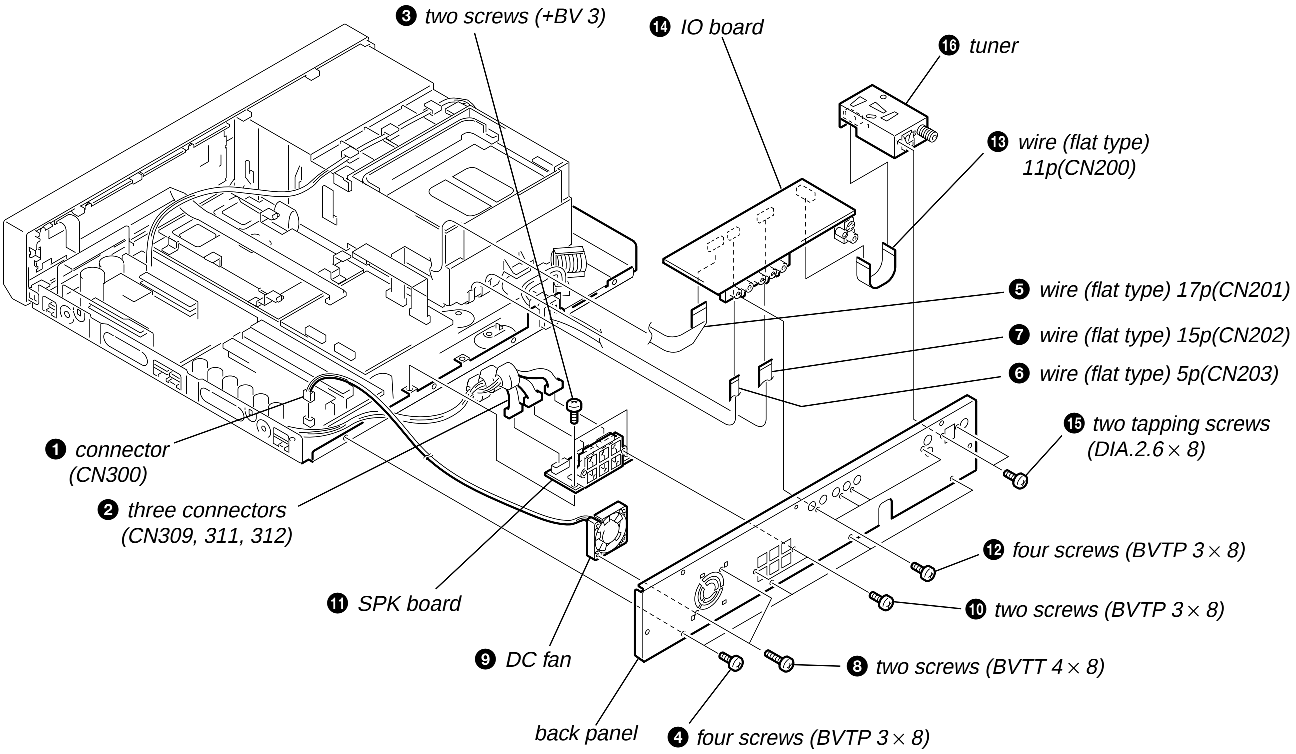
2-5. AMP BOARD


❼ two screws (+BVTP 3 × 16)
❽ AMP RETAINER BOARD
❾ screw (+BVTP 3 × 16)
❿ two screws (+BV 3)
⓫ heat sink (AMP)
❷ wire (flat type) 9p(CN302)
❸ connector (CN300)
❶ wire (flat type) 17p(CN301)
⓬ four screws (+BV 3)
⓭ AMP board
clamp (L35)
tape
❻ connector (CN313)
❺ connector (CN307)
❹ connector (CN306)

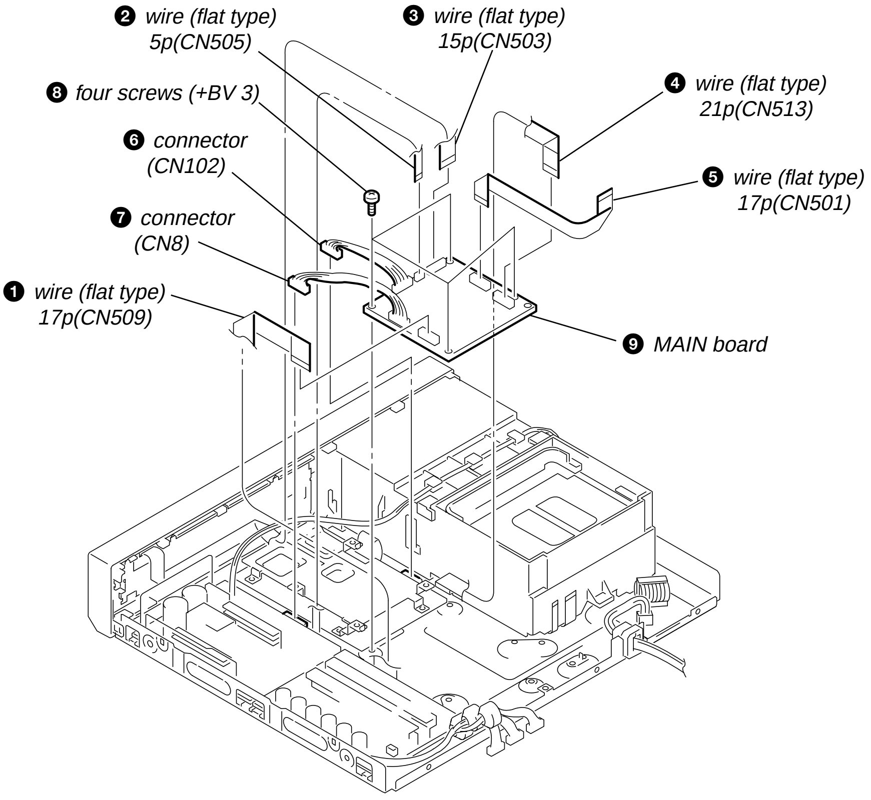
2-6. DMB07 BOARD


❼ screw (+BV 3)
❽ three screws (+BV 3)
❾ heat sink(DMB)
❸ wire (flat type) 5p(CN107)
❹ wire (flat type) 9p(CN106)
❷ connector (CN102)
❶ wire (flat type) 29p(CN501)
❺ wire (flat type) 5p(CN101)
❻ wire (flat type) 17p(CN105)
❿ DMB07 board

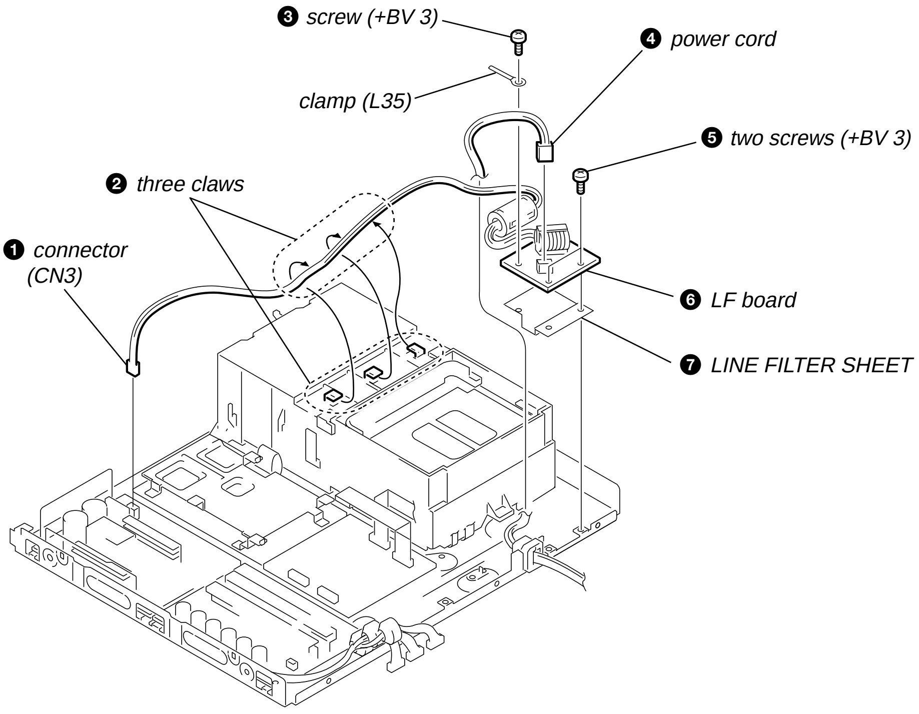
2-7. SPK BOARD, IO BOARD, DC FAN


❸ two screws (+BV 3)
⓮ IO board
⓰ tuner
⓭ wire (flat type) 11p(CN200)
❺ wire (flat type) 17p(CN201)
❼ wire (flat type) 15p(CN202)
❻ wire (flat type) 5p(CN203)
⓯ two tapping screws (DIA.2.6 × 8)
❶ connector (CN300)
❷ three connectors (CN309, 311, 312)
⓬ four screws (BVTP 3 × 8)
⓫ SPK board
❿ two screws (BVTP 3 × 8)
❾ DC fan
❽ two screws (BVTT 4 × 8)
back panel
❹ four screws (BVTP 3 × 8)

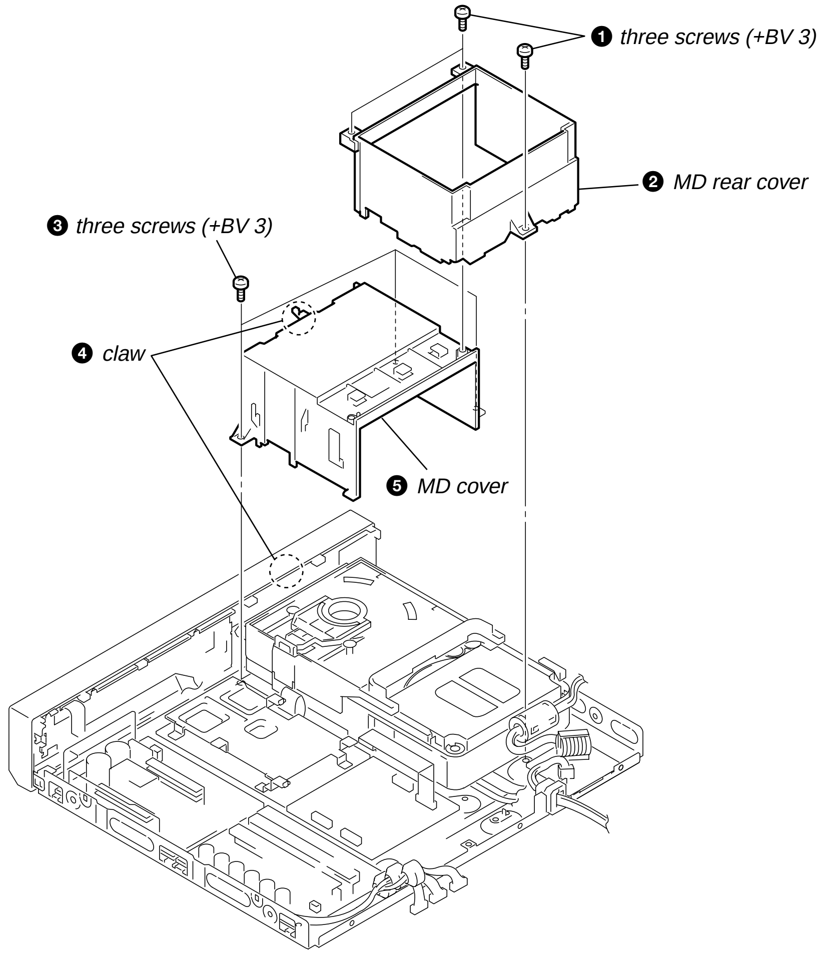
2-8. MAIN BOARD


❷ wire (flat type) 5p(CN505)
❸ wire (flat type) 15p(CN503)
❽ four screws (+BV 3)
❹ wire (flat type) 21p(CN513)
❻ connector (CN102)
❺ wire (flat type) 17p(CN501)
❼ connector (CN8)
❶ wire (flat type) 17p(CN509)
❾ MAIN board

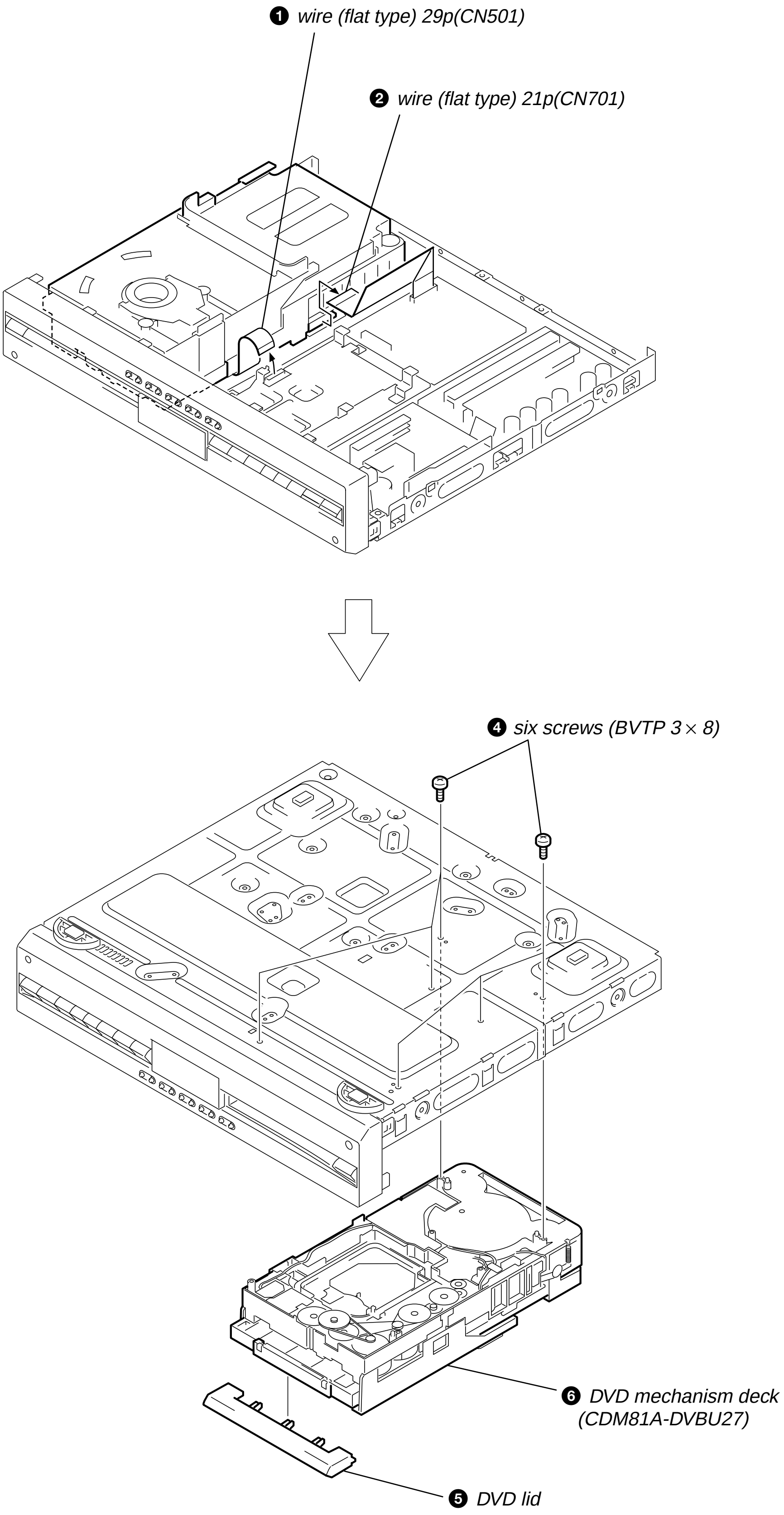
2-9. LF BOARD


❸ screw (+BV 3)
❹ power cord
clamp (L35)
❺ two screws (+BV 3)
❷ three claws
❶ connector (CN3)
❻ LF board
❼ LINE FILTER SHEET

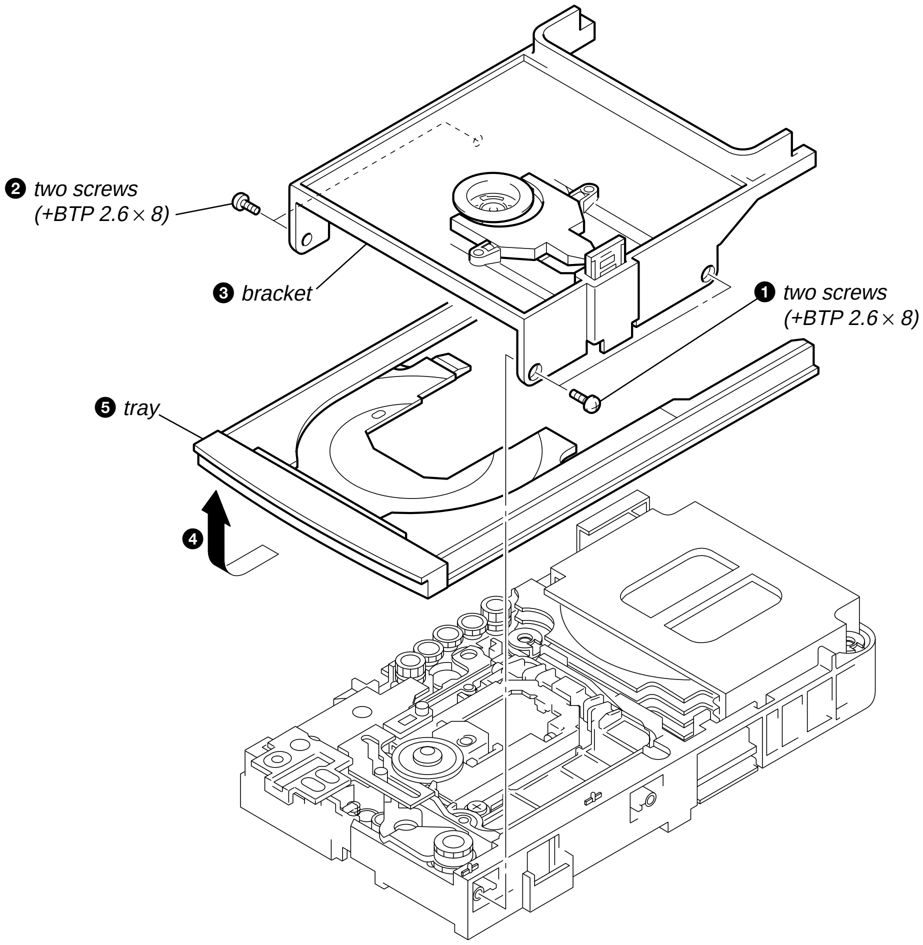
2-10. MD REAR COVER


❶ three screws (+BV 3)
❷ MD rear cover
❸ three screws (+BV 3)
❹ claw
❺ MD cover

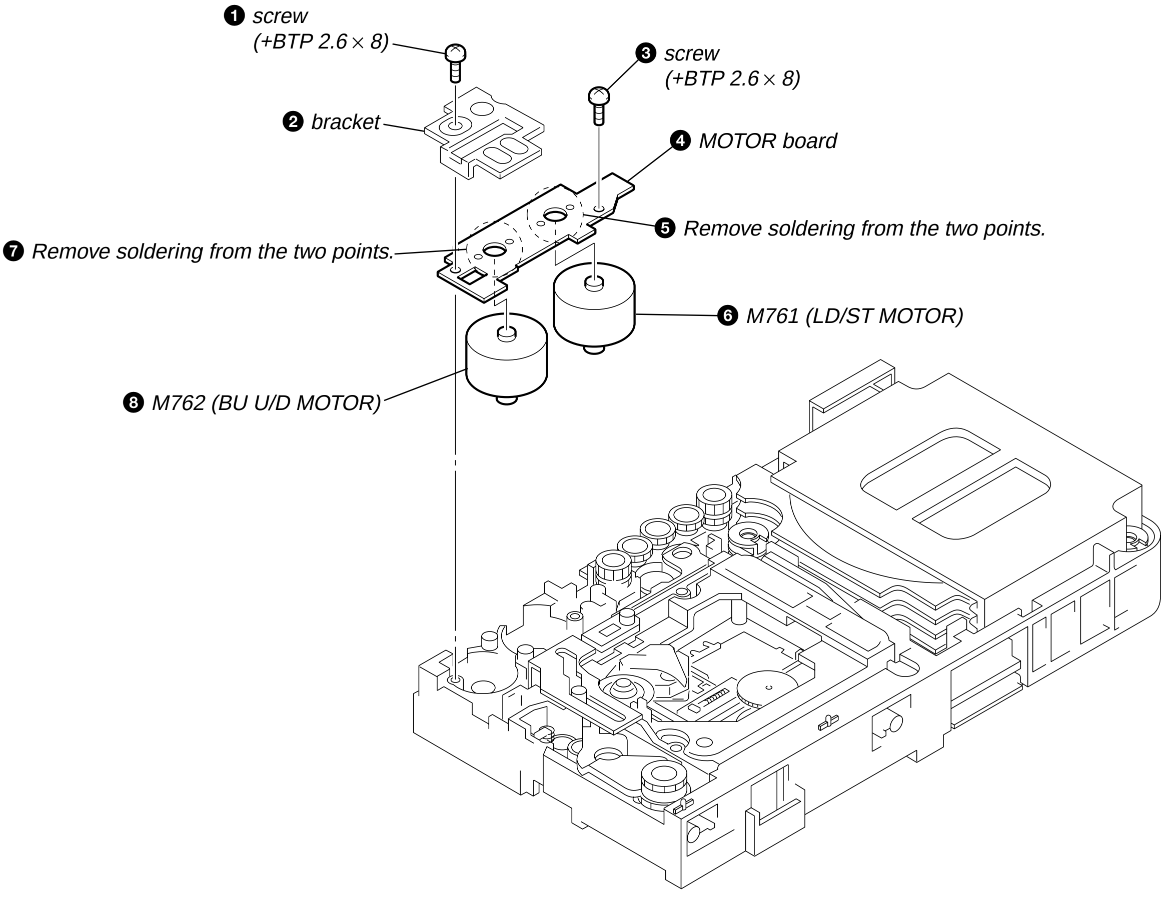
2-11. DVD MECHANISM DECK (CDM81A-DVBU27)


❶ wire (flat type) 29p(CN501)
❷ wire (flat type) 21p(CN701)
❹ six screws (BVTP 3 × 8)
❻ DVD mechanism deck (CDM81A-DVBU27)
❺ DVD lid

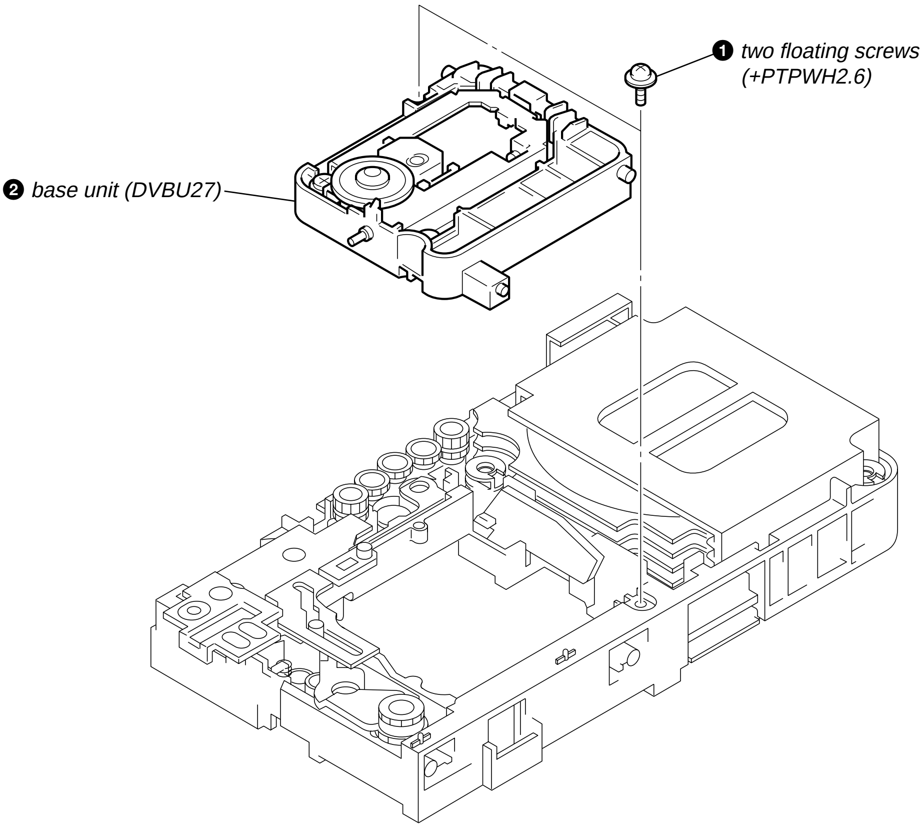
2-12. TRAY


❷ two screws
(+BTP 2.6 × 8)
❸ bracket
❶ two screws
(+BTP 2.6 × 8)
❺ tray
❹

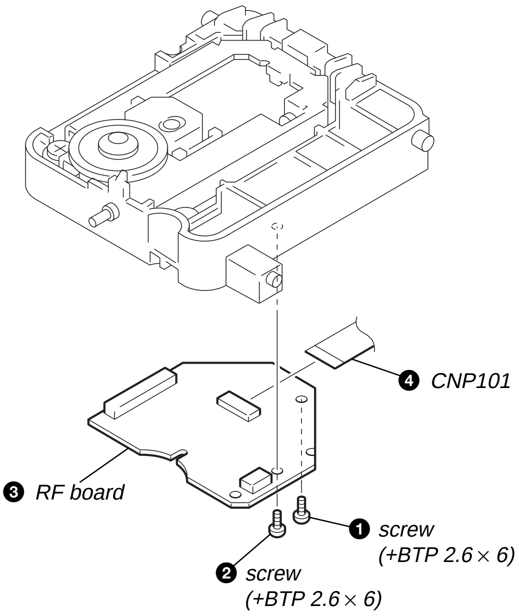
2-13. MOTOR BOARD, M761 (LD/ST MOTOR), M762 (BU U/D MOTOR)


❶ screw
(+BTP 2.6 × 8)
❸ screw
(+BTP 2.6 × 8)
❷ bracket
❹ MOTOR board
❺ Remove soldering from the two points.
❼ Remove soldering from the two points.
❻ M761 (LD/ST MOTOR)
❽ M762 (BU U/D MOTOR)

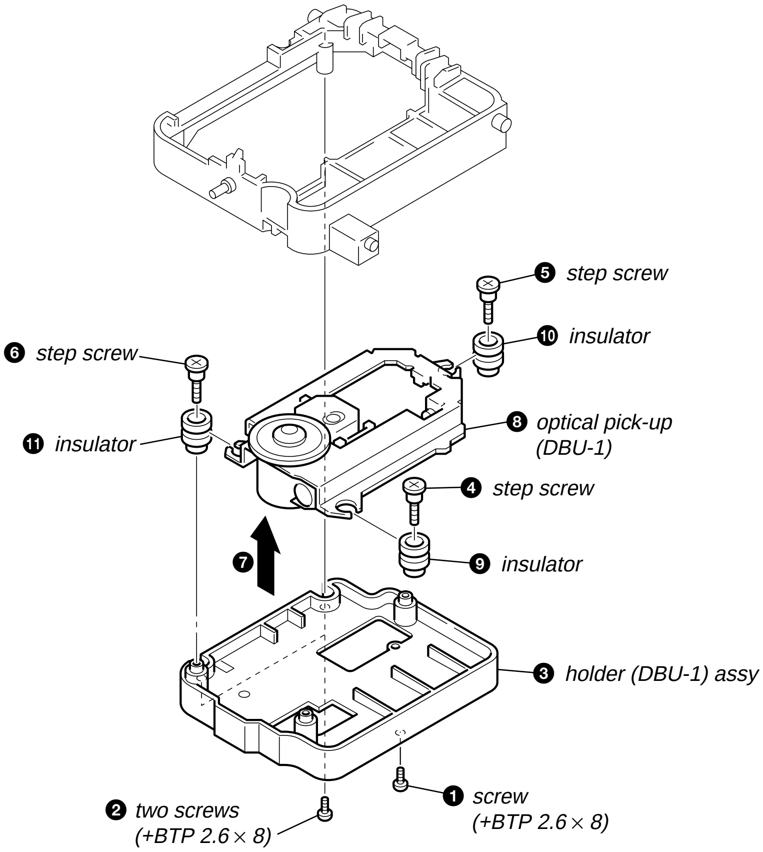
2-14. BASE UNIT (DVBU27)


❶ two floating screws
(+PTPWH2.6)
❷ base unit (DVBU27)

2-15. RF BOARD


❹ CNP101
❸ RF board
❶ screw
(+BTP 2.6 × 6)
❷ screw
(+BTP 2.6 × 6)

2-16. OPTICAL PICK-UP (DBU-1)


❺ step screw
❻ step screw
❿ insulator
⓫ insulator
❽ optical pick-up (DBU-1)
❹ step screw
❼
❾ insulator
❸ holder (DBU-1) assy
❶ screw (+BTP 2.6 × 8)
❷ two screws (+BTP 2.6 × 8)

MEMO

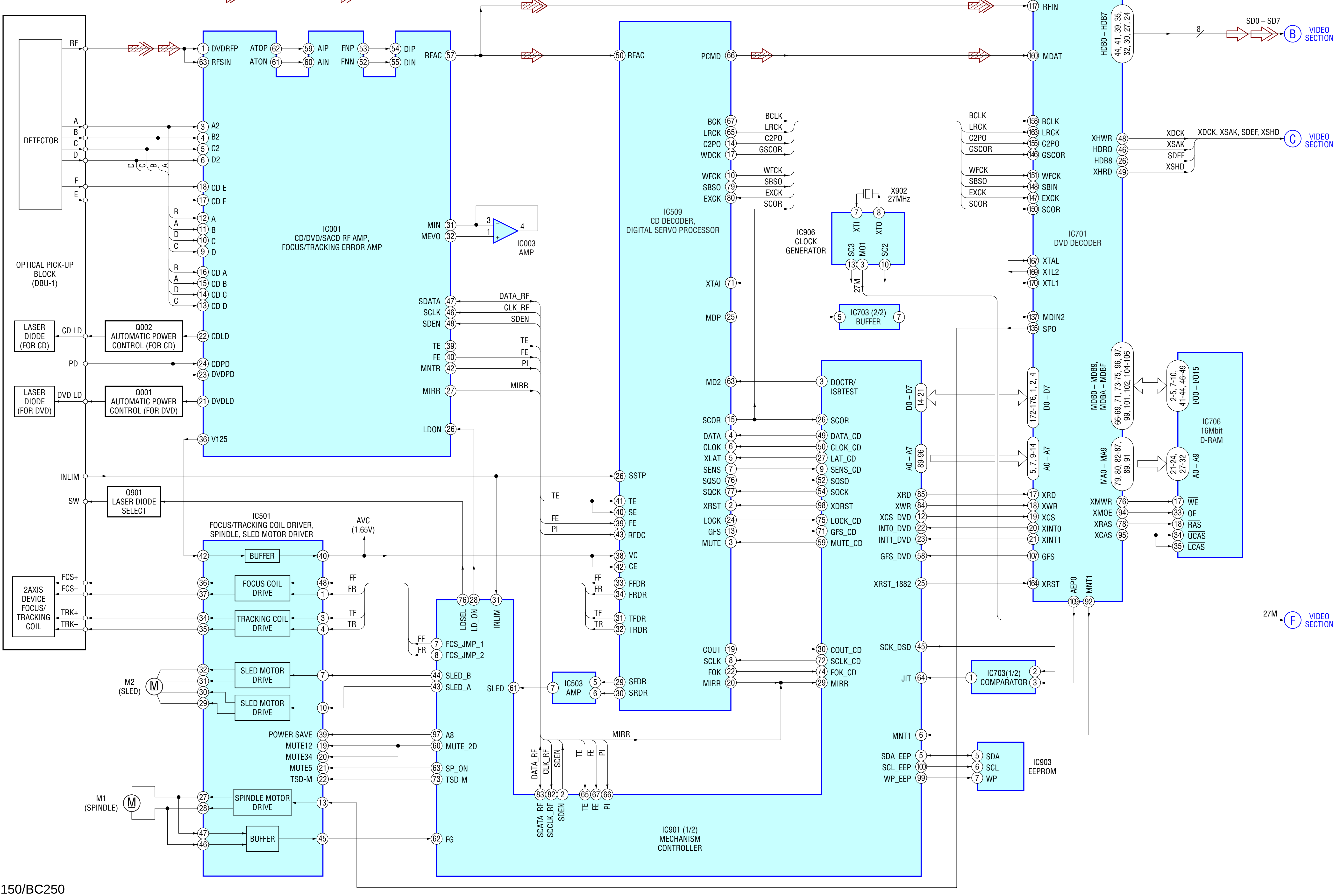
SECTION 3
DIAGRAMS

3-1. BLOCK DIAGRAM — RF SERVO SECTION —

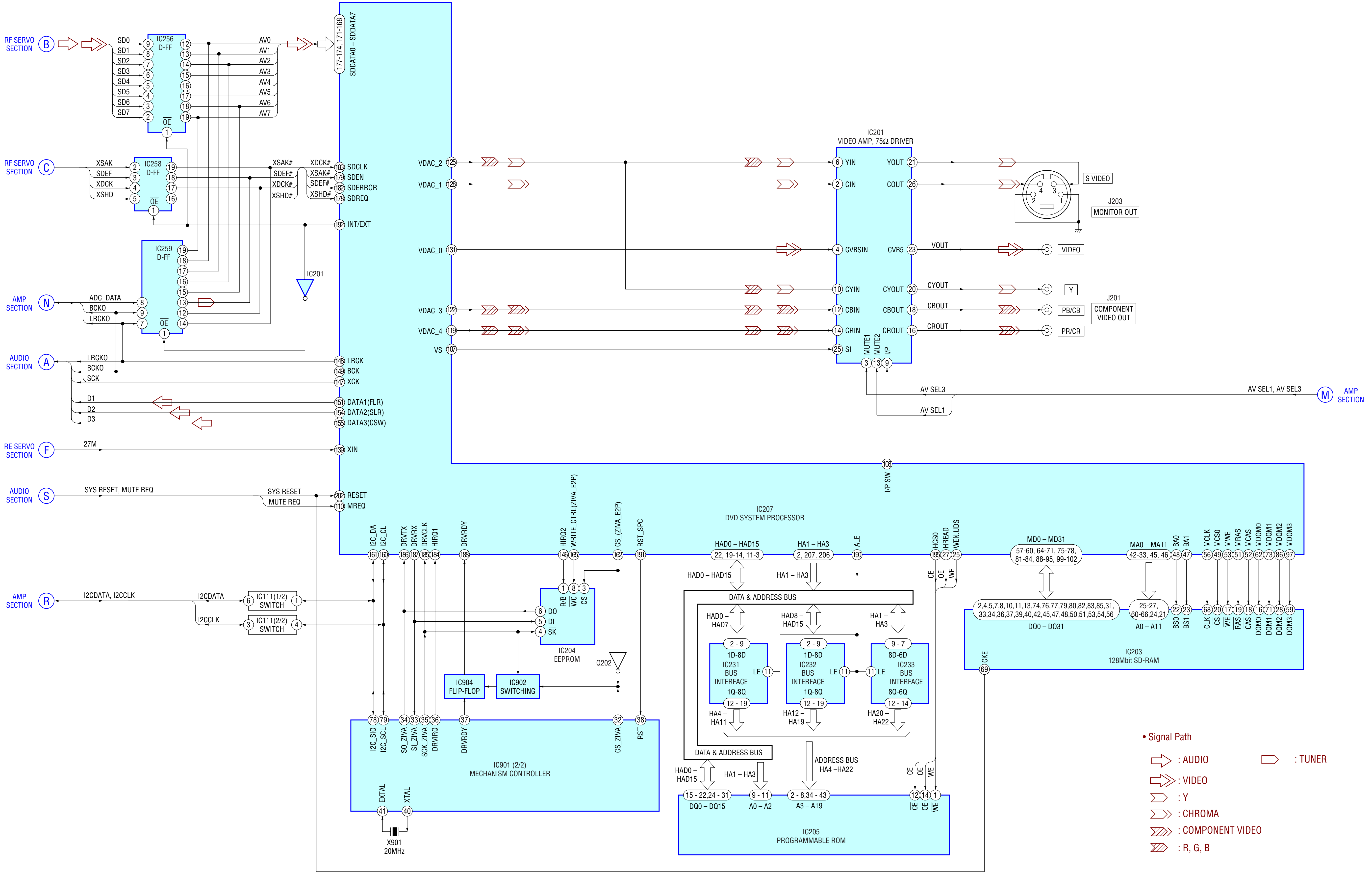
• Signal Path

⇨ : CD PLAY ⇨ : AUDIO

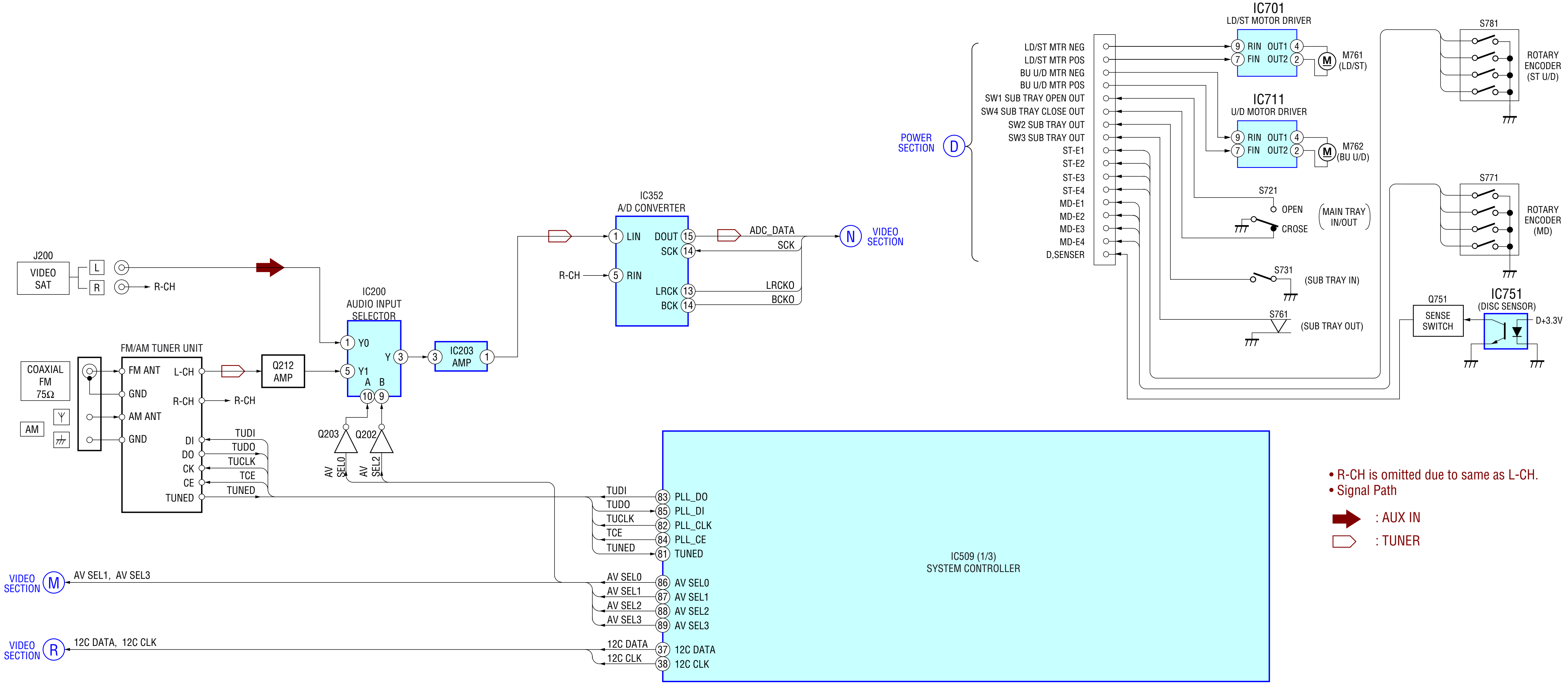
⇨ : DVD PLAY ⇨ : VIDEO


DETECTOR
OPTICAL PICK-UP BLOCK (DBU-1)
RF
A
B
C
D
F
E
LASER DIODE (FOR CD)
CD LD
Q002 AUTOMATIC POWER CONTROL (FOR CD)
PD
LASER DIODE (FOR DVD)
DVD LD
Q001 AUTOMATIC POWER CONTROL (FOR DVD)
INLIM
SW
Q901 LASER DIODE SELECT
2AXIS DEVICE FOCUS/ TRACKING COIL
FCS+
FCS–
TRK+
TRK–
M2 (SLED)
M1 (SPINDLE)
IC001 CD/DVD/SACD RF AMP, FOCUS/TRACKING ERROR AMP
DVDRFP
RFSIN
ATOP
ATON
AIP
AIN
FNP
FNN
DIP
DIN
RFAC
CD E
CD F
CD A
CD B
CD C
CD D
CDLD
CDPD
DVDPD
DVDLD
V125
MIN
MEVO
SDATA
SCLK
SDEN
TE
FE
MNTR
MIRR
LDON
IC003 AMP
DATA_RF
CLK_RF
SDEN
PI
IC501 FOCUS/TRACKING COIL DRIVER, SPINDLE, SLED MOTOR DRIVER
AVC (1.65V)
BUFFER
FOCUS COIL DRIVE
TRACKING COIL DRIVE
SLED MOTOR DRIVE
SLED MOTOR DRIVE
SPINDLE MOTOR DRIVE
BUFFER
FF
FR
TF
TR
POWER SAVE
MUTE12
MUTE34
MUTE5
TSD-M
IC509 CD DECODER, DIGITAL SERVO PROCESSOR
RFAC
PCMD
BCK
LRCK
C2PO
WDCK
WFCK
SBSO
EXCK
XTAI
MDP
MD2
SCOR
DATA
CLOK
XLAT
SENS
SQSO
SQCK
XRST
LOCK
GFS
MUTE
COUT
SCLK
FOK
MIRR
SSTP
SE
RFDC
VC
CE
FFDR
FRDR
TFDR
TRDR
SFDR
SRDR
BCLK
GSCOR
SCOR
X902 27MHz
IC906 CLOCK GENERATOR
XTI
XTO
SO3
MO1
SO2
27M
IC703 (2/2) BUFFER
IC503 AMP
IC901 (1/2) MECHANISM CONTROLLER
LDSEL
LD_ON
INLIM
FCS_JMP_1
FCS_JMP_2
SLED_B
SLED_A
SLED
A8
MUTE_2D
SP_ON
TSD-M
FG
SDATA_RF
SDCLK_RF
SDEN
DOCTR/ ISBTEST
DATA_CD
CLOK_CD
LAT_CD
SENS_CD
XDRST
LOCK_CD
GFS_CD
MUTE_CD
COUT_CD
SCLK_CD
FOK_CD
D0 – D7
A0 – A7
XRD
XWR
XCS_DVD
INT0_DVD
INT1_DVD
GFS_DVD
XRST_1882
SCK_DSD
JIT
MNT1
SDA_EEP
SCL_EEP
WP_EEP
IC703(1/2) COMPARATOR
IC903 EEPROM
SDA
SCL
WP
IC701 DVD DECODER
RFIN
MDAT
HDB0 – HDB7
SD0 – SD7
8
VIDEO SECTION
XHWR
HDRQ
HDB8
XHRD
XDCK
XSAK
SDEF
XSHD
XDCK, XSAK, SDEF, XSHD
EXCK
SBIN
XTAL
XTL2
XTL1
MDIN2
SPO
MDB0 – MDB9, MDBA – MDBF
MA0 – MA9
XMWR
XMOE
XRAS
XCAS
XINT0
XINT1
GFS
XRST
AEP0
MNT1
IC706 16Mbit D-RAM
I/O0 – I/O15
A0 – A9
WE
OE
RAS
UCAS
LCAS
27M
B
C
F

— VIDEO SECTION —


RF SERVO SECTION B
SD0 SD1 SD2 SD3 SD4 SD5 SD6 SD7
IC256 D-FF
AV0 AV1 AV2 AV3 AV4 AV5 AV6 AV7
RF SERVO SECTION C
XSAK SDEF XDCK XSHD
IC258 D-FF
XSAK# SDEF# XDCK# XSHD#
XDCK# XSAK# SDEF# XSHD#
IC259 D-FF
AMP SECTION N
ADC_DATA BCKO LRCKO
IC201
AUDIO SECTION A
LRCKO BCKO SCK
D1 D2 D3
RE SERVO SECTION F
27M
AUDIO SECTION S
SYS RESET, MUTE REQ
SYS RESET
MUTE REQ
177-174, 171-168
SDDATA0 – SDDATA7
SDCLK SDEN SDERROR SDREQ
INT/EXT
LRCK BCK XCK
DATA1(FLR) DATA2(SLR) DATA3(CSW)
XIN
RESET MREQ
VDAC_2 VDAC_1 VDAC_0 VDAC_3 VDAC_4 VS
IC201
VIDEO AMP, 75Ω DRIVER
YIN CIN CVBSIN CYIN CBIN CRIN SI
YOUT COUT CVBS CYOUT CBOUT CROUT
MUTE1 MUTE2 I/P
S VIDEO
J203
MONITOR OUT
VOUT
VIDEO
CYOUT CBOUT CROUT
Y PB/CB PR/CR
J201
COMPONENT VIDEO OUT
AV SEL3
AV SEL1
AV SEL1, AV SEL3
AMP SECTION M
I/P SW
IC207
DVD SYSTEM PROCESSOR
I2C_DA I2C_CL DRVTX DRVRX DRVCLK HIRQ1 DRVRDY HIRQ2 WRITE_CTRL(ZIVA_E2P) CS_(ZIVA_E2P) RST_SPC
HAD0 – HAD15
22, 19-14, 11-3
HA1 – HA3
2, 207, 206
ALE
HCS0 HREAD HWEN.UDS
MD0 – MD31
57-60, 64-71, 75-78, 81-84, 88-95, 99-102
MA0 – MA11
42-33, 45, 46
BA0 BA1
MCLK MCS0 MWE MRAS MCAS MDQM0 MDQM1 MDQM2 MDQM3
AMP SECTION R
I2CDATA, I2CCLK
I2CDATA
I2CCLK
IC111(1/2) SWITCH
IC111(2/2) SWITCH
R/B WC CS
DO DI SK
IC204 EEPROM
Q202
IC904 FLIP-FLOP
IC902 SWITCHING
I2C_SIO I2C_SCL SO_ZIVA SI_ZIVA SCK_ZIVA DRVIRQ DRVRDY CS_ZIVA RST
IC901 (2/2)
MECHANISM CONTROLLER
EXTAL XTAL
X901 20MHz
DATA & ADDRESS BUS
HAD0 – HAD7
HAD8 – HAD15
HA1 – HA3
1D-8D IC231 BUS INTERFACE 1Q-8Q
1D-8D IC232 BUS INTERFACE 1Q-8Q
8D-6D IC233 BUS INTERFACE 8Q-6Q
LE
HA4 – HA11
HA12 – HA19
HA20 – HA22
DATA & ADDRESS BUS
ADDRESS BUS HA4 –HA22
HAD0 – HAD15
HA1 – HA3
15 - 22,24 - 31
DQ0 – DQ15
9 - 11
A0 – A2
2 - 8,34 - 43
A3 – A19
CE OE WE
IC205
PROGRAMMABLE ROM
2,4,5,7,8,10,11,13,74,76,77,79,80,82,83,85,31, 33,34,36,37,39,40,42,45,47,48,50,51,53,54,56
DQ0 – DQ31
25-27, 60-66,24,21
A0 – A11
BS0 BS1 CLK CS WE RAS CAS DQM0 DQM1 DQM2 DQM3
CKE
IC203
128Mbit SD-RAM
• Signal Path
: AUDIO
: TUNER
: VIDEO
: Y
: CHROMA
: COMPONENT VIDEO
: R, G, B

— AMP SECTION —


J200
VIDEO SAT
L
R
R-CH
COAXIAL FM 75Ω
AM
FM/AM TUNER UNIT
FM ANT
GND
AM ANT
GND
L-CH
R-CH
R-CH
DI
DO
CK
CE
TUNED
TUDI
TUDO
TUCLK
TCE
TUNED
Q212 AMP
IC200 AUDIO INPUT SELECTOR
Y0
Y1
Y
A
B
Q203
Q202
AV SEL0
AV SEL2
IC203 AMP
IC352 A/D CONVERTER
LIN
RIN
DOUT
SCK
LRCK
BCK
R-CH
ADC_DATA
SCK
LRCKO
BCKO
N
VIDEO SECTION
POWER SECTION
D
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 SUB TRAY OPEN OUT
SW4 SUB TRAY CLOSE OUT
SW2 SUB TRAY OUT
SW3 SUB TRAY OUT
ST-E1
ST-E2
ST-E3
ST-E4
MD-E1
MD-E2
MD-E3
MD-E4
D,SENSER
IC701 LD/ST MOTOR DRIVER
RIN
FIN
OUT1
OUT2
M761 (LD/ST)
IC711 U/D MOTOR DRIVER
RIN
FIN
OUT1
OUT2
M762 (BU U/D)
S781
ROTARY ENCODER (ST U/D)
S771
ROTARY ENCODER (MD)
S721
OPEN
CROSE
(MAIN TRAY IN/OUT)
S731
(SUB TRAY IN)
S761
(SUB TRAY OUT)
Q751 SENSE SWITCH
IC751 (DISC SENSOR)
D+3.3V
VIDEO SECTION
M
AV SEL1, AV SEL3
VIDEO SECTION
R
12C DATA, 12C CLK
TUDI
TUDO
TUCLK
TCE
TUNED
AV SEL0
AV SEL1
AV SEL2
AV SEL3
12C DATA
12C CLK
PLL_DO
PLL_DI
PLL_CLK
PLL_CE
TUNED
AV SEL0
AV SEL1
AV SEL2
AV SEL3
12C DATA
12C CLK
IC509 (1/3) SYSTEM CONTROLLER

- R-CH is omitted due to same as L-CH.
- Signal Path

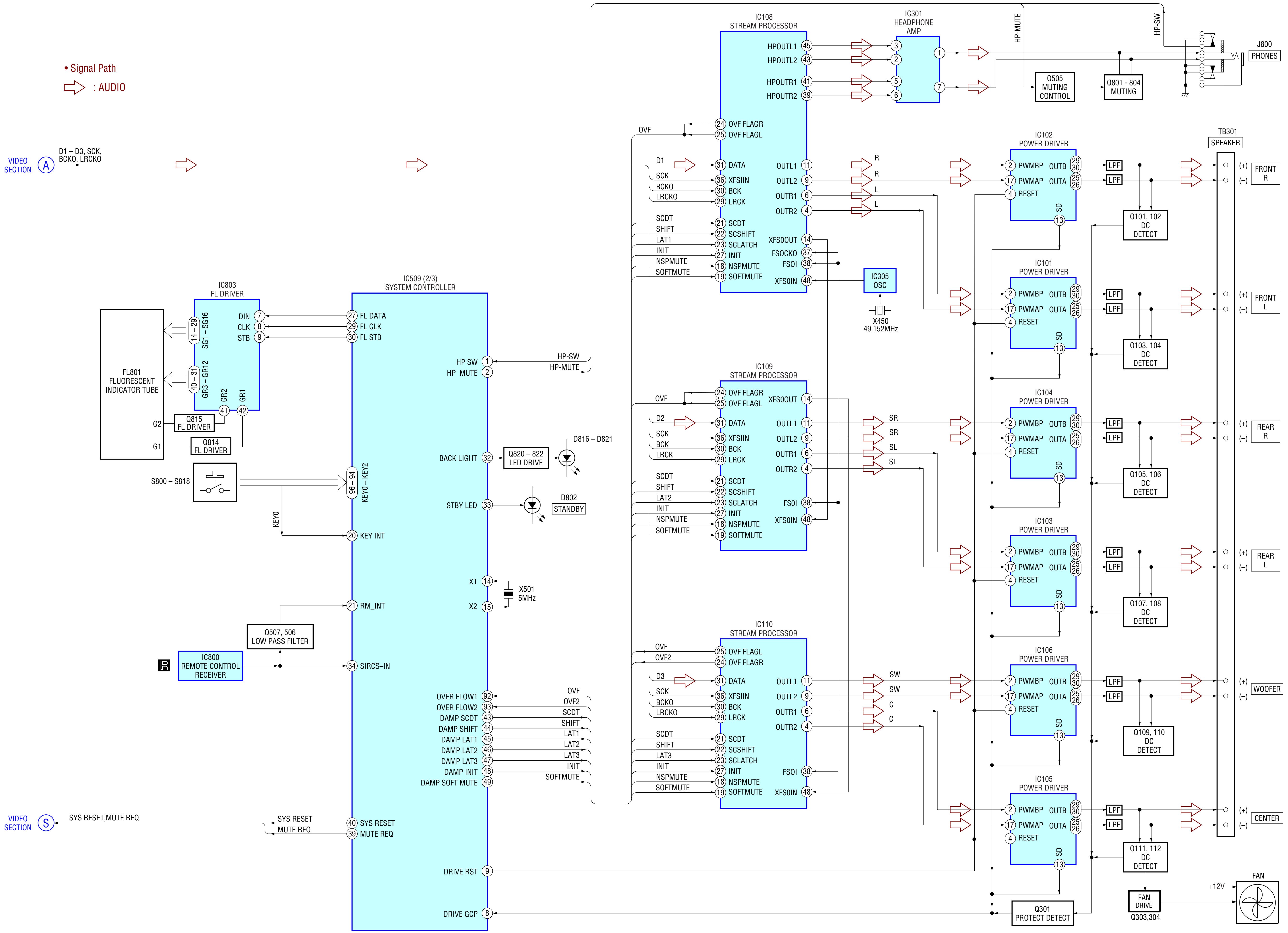
➡ : AUX IN

▭ : TUNER

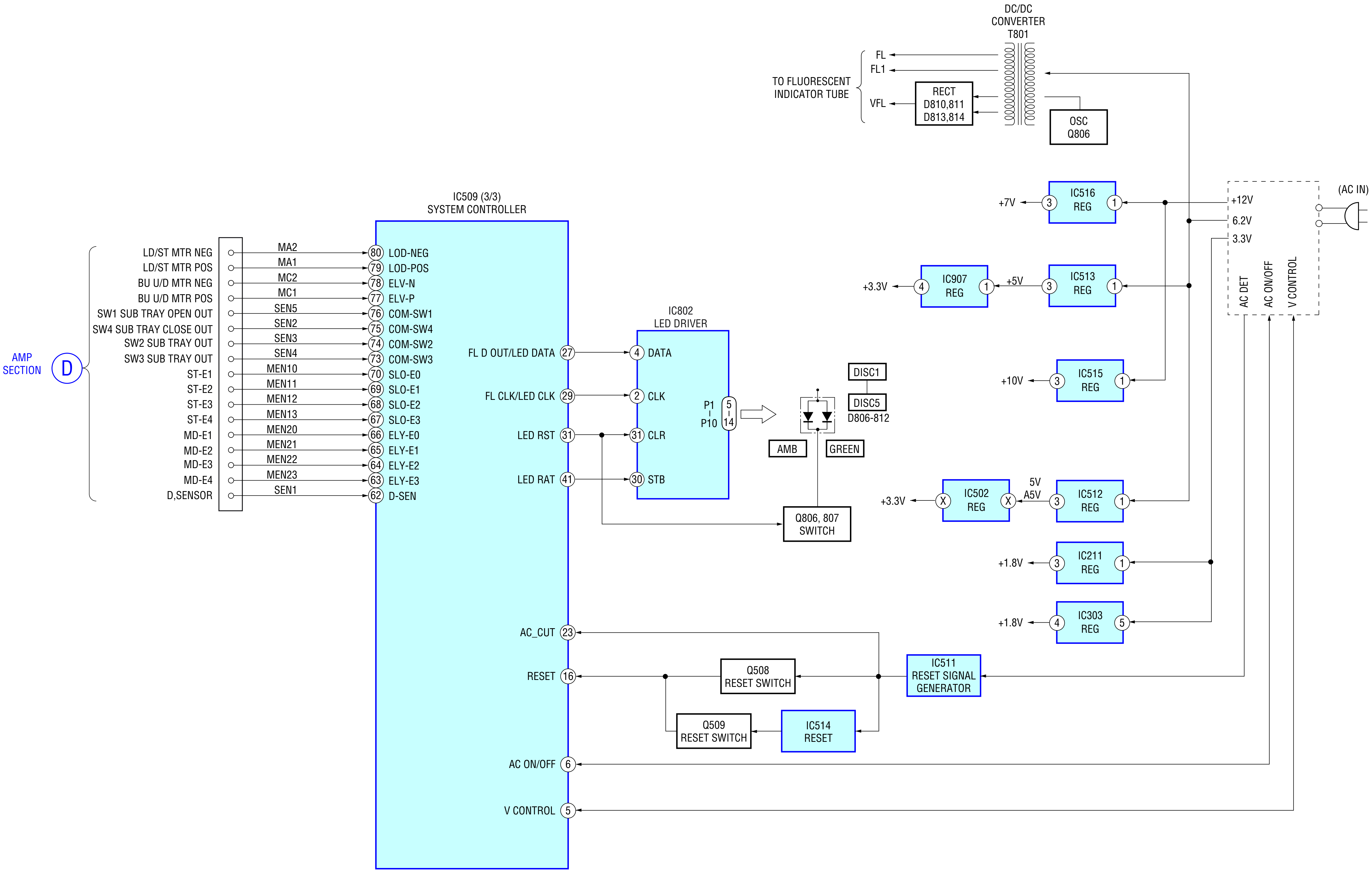
— AUDIO SECTION —

• Signal Path

⇨ : AUDIO


VIDEO SECTION
A
D1 – D3, SCK, BCKO, LRCKO
IC108
STREAM PROCESSOR
HPOUTL1 45
HPOUTL2 43
HPOUTR1 41
HPOUTR2 39
24 OVF FLAGR
25 OVF FLAGL
OVF
D1
31 DATA
SCK
36 XFSIIN
BCKO
30 BCK
LRCKO
29 LRCK
SCDT
21 SCDT
SHIFT
22 SCSHIFT
LAT1
23 SCLATCH
INIT
27 INIT
NSPMUTE
18 NSPMUTE
SOFTMUTE
19 SOFTMUTE
OUTL1 11
OUTL2 9
OUTR1 6
OUTR2 4
XFSOOUT 14
FSOCKO 37
FSOI 38
XFSOIN 48
R
R
L
L
IC305
OSC
X450
49.152MHz
IC301
HEADPHONE AMP
3
2
5
6
1
7
HP-MUTE
HP-SW
Q505
MUTING CONTROL
Q801 - 804
MUTING
J800
PHONES
TB301
SPEAKER
IC102
POWER DRIVER
2 PWMBP
17 PWMAP
4 RESET
OUTB 29 30
OUTA 25 26
SD 13
LPF
Q101, 102
DC DETECT
(+)
(–)
FRONT R
IC101
POWER DRIVER
Q103, 104
DC DETECT
FRONT L
IC104
POWER DRIVER
Q105, 106
DC DETECT
REAR R
IC103
POWER DRIVER
Q107, 108
DC DETECT
REAR L
IC106
POWER DRIVER
Q109, 110
DC DETECT
WOOFER
IC105
POWER DRIVER
Q111, 112
DC DETECT
CENTER
FAN
+12V
FAN DRIVE
Q303,304
Q301
PROTECT DETECT
IC109
STREAM PROCESSOR
OVF
D2
SCK
BCK
LRCK
SCDT
SHIFT
LAT2
INIT
NSPMUTE
SOFTMUTE
SR
SR
SL
SL
IC110
STREAM PROCESSOR
OVF
OVF2
25 OVF FLAGL
24 OVF FLAGR
D3
SCK
BCKO
LRCKO
SCDT
SHIFT
LAT3
INIT
NSPMUTE
SOFTMUTE
SW
SW
C
C
IC803
FL DRIVER
14 – 29 SG1 – SG16
40 – 31 GR3 – GR12
GR2 41
GR1 42
DIN 7
CLK 8
STB 9
FL801
FLUORESCENT INDICATOR TUBE
G2
G1
Q815
FL DRIVER
Q814
FL DRIVER
S800 – S818
KEY0
IC509 (2/3)
SYSTEM CONTROLLER
27 FL DATA
29 FL CLK
30 FL STB
HP SW 1
HP MUTE 2
HP-SW
HP-MUTE
BACK LIGHT 32
Q820 – 822
LED DRIVE
D816 – D821
STBY LED 33
D802
STANDBY
96 – 94 KEY0 – KEY2
20 KEY INT
X1 14
X2 15
X501
5MHz
21 RM_INT
Q507, 506
LOW PASS FILTER
IC800
REMOTE CONTROL RECEIVER
34 SIRCS–IN
OVER FLOW1 92
OVER FLOW2 93
DAMP SCDT 43
DAMP SHIFT 44
DAMP LAT1 45
DAMP LAT2 46
DAMP LAT3 47
DAMP INIT 48
DAMP SOFT MUTE 49
OVF
OVF2
SCDT
SHIFT
LAT1
LAT2
LAT3
INIT
SOFTMUTE
VIDEO SECTION
S
SYS RESET,MUTE REQ
SYS RESET
MUTE REQ
40 SYS RESET
39 MUTE REQ
DRIVE RST 9
DRIVE GCP 8

— POWER SECTION —


DC/DC
CONVERTER
T801
TO FLUORESCENT
INDICATOR TUBE
FL
FL1
VFL
RECT
D810,811
D813,814
OSC
Q806
(AC IN)
+12V
6.2V
3.3V
AC DET
AC ON/OFF
V CONTROL
IC516
REG
+7V
IC907
REG
+3.3V
+5V
IC513
REG
IC515
REG
+10V
IC502
REG
+3.3V
5V
A5V
IC512
REG
IC211
REG
+1.8V
IC303
REG
+1.8V
IC511
RESET SIGNAL
GENERATOR
Q508
RESET SWITCH
Q509
RESET SWITCH
IC514
RESET
IC509 (3/3)
SYSTEM CONTROLLER
IC802
LED DRIVER
FL D OUT/LED DATA
FL CLK/LED CLK
LED RST
LED RAT
DATA
CLK
CLR
STB
P1
P10
DISC1
DISC5
D806-812
AMB
GREEN
Q806, 807
SWITCH
AC_CUT
RESET
AC ON/OFF
V CONTROL
AMP
SECTION
D
LD/ST MTR NEG
LD/ST MTR POS
BU U/D MTR NEG
BU U/D MTR POS
SW1 SUB TRAY OPEN OUT
SW4 SUB TRAY CLOSE OUT
SW2 SUB TRAY OUT
SW3 SUB TRAY OUT
ST-E1
ST-E2
ST-E3
ST-E4
MD-E1
MD-E2
MD-E3
MD-E4
D,SENSOR
MA2
MA1
MC2
MC1
SEN5
SEN2
SEN3
SEN4
MEN10
MEN11
MEN12
MEN13
MEN20
MEN21
MEN22
MEN23
SEN1
LOD-NEG
LOD-POS
ELV-N
ELV-P
COM-SW1
COM-SW4
COM-SW2
COM-SW3
SLO-E0
SLO-E1
SLO-E2
SLO-E3
ELY-E0
ELY-E1
ELY-E2
ELY-E3
D-SEN

MEMO

HCD-BC150/BC250

SONY®

SERVICE MANUAL

Ver 1.4 2004.09

US Model
Canadian Model
E Model
HCD-BC150/BC250
Australian Model
HCD-BC150

SUPPLEMENT-4

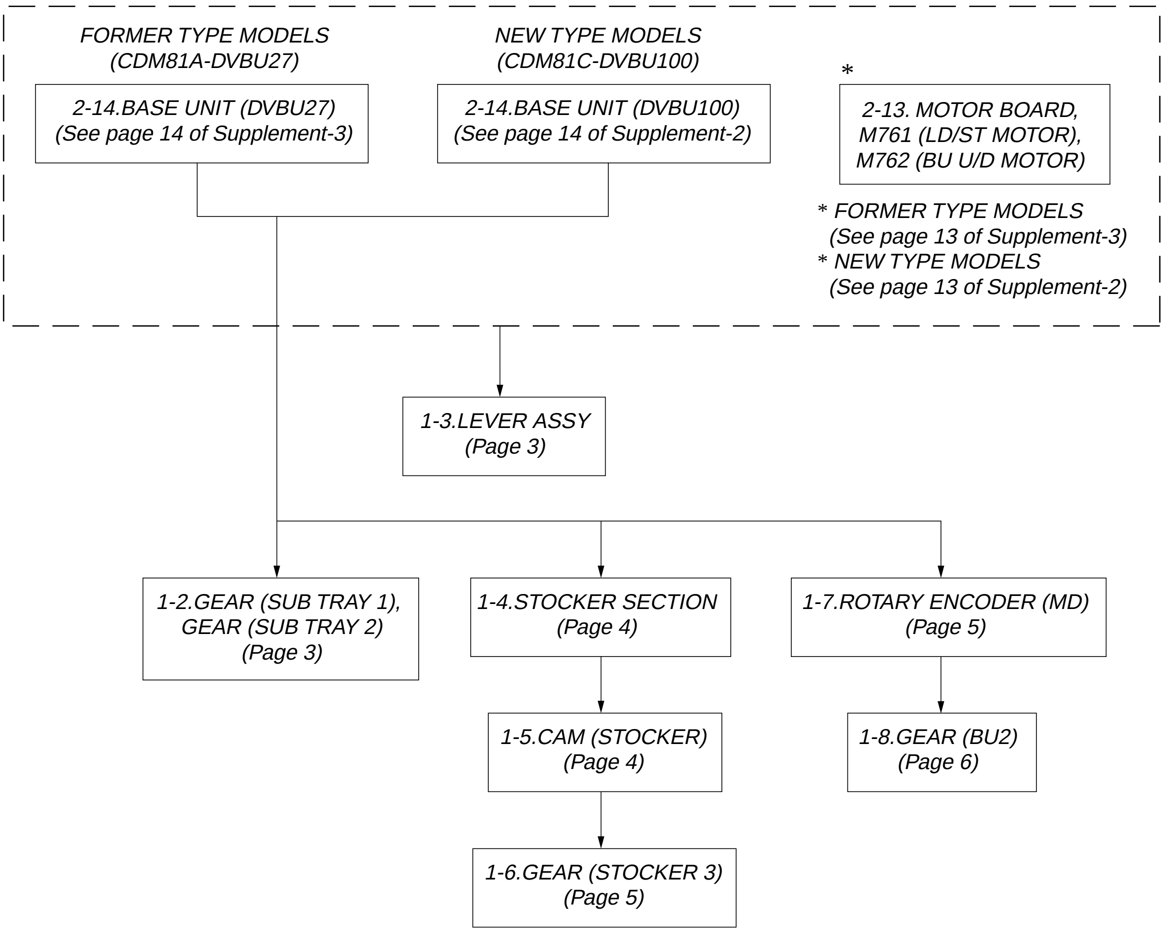
Subject: CDM81 DISASSEMBLY

9-877-956-84

SECTION 1
CDM81 DISASSEMBLY

1-1. DISASSEMBLY FLOW

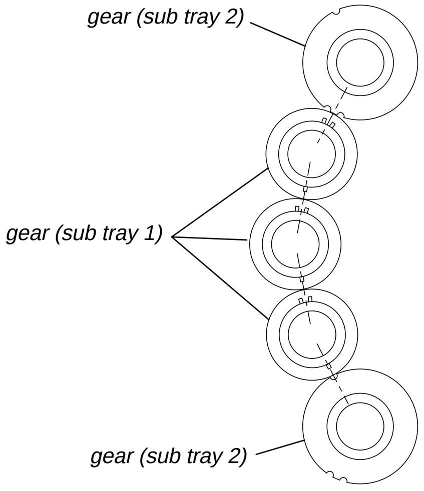
- This set can be disassembled in the order shown below.
- The dotted square with arrow (⬚→) prompts you to move to the next job when all of the works within the dotted square (⬚) are completed.

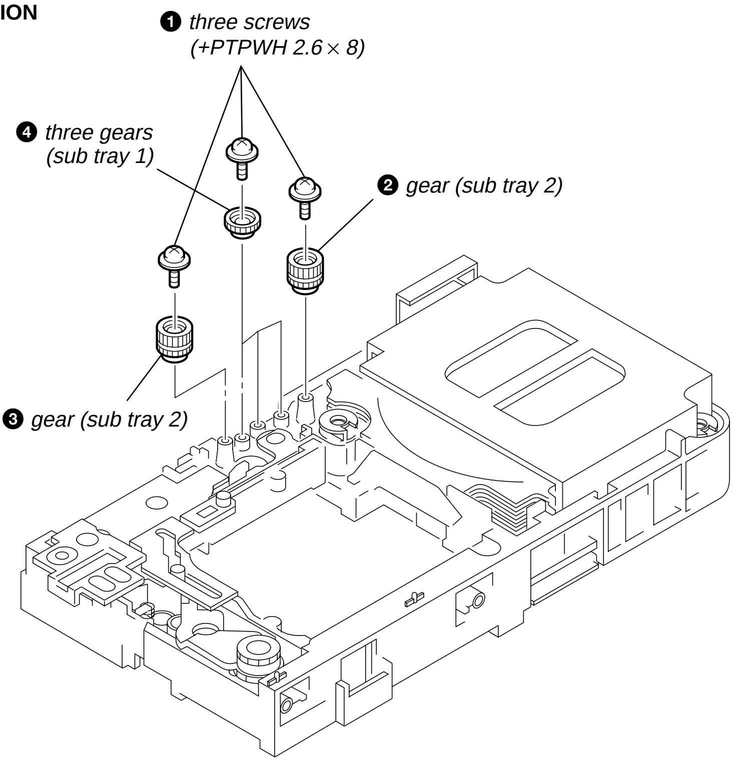

FORMER TYPE MODELS
(CDM81A-DVBU27)
NEW TYPE MODELS
(CDM81C-DVBU100)
*
2-14.BASE UNIT (DVBU27)
(See page 14 of Supplement-3)
2-14.BASE UNIT (DVBU100)
(See page 14 of Supplement-2)
2-13. MOTOR BOARD,
M761 (LD/ST MOTOR),
M762 (BU U/D MOTOR)
* FORMER TYPE MODELS
(See page 13 of Supplement-3)
* NEW TYPE MODELS
(See page 13 of Supplement-2)
1-3.LEVER ASSY
(Page 3)
1-2.GEAR (SUB TRAY 1),
GEAR (SUB TRAY 2)
(Page 3)
1-4.STOCKER SECTION
(Page 4)
1-7.ROTARY ENCODER (MD)
(Page 5)
1-5.CAM (STOCKER)
(Page 4)
1-8.GEAR (BU2)
(Page 6)
1-6.GEAR (STOCKER 3)
(Page 5)

1-2. GEAR (SUB TRAY 1), GEAR (SUB TRAY 2)

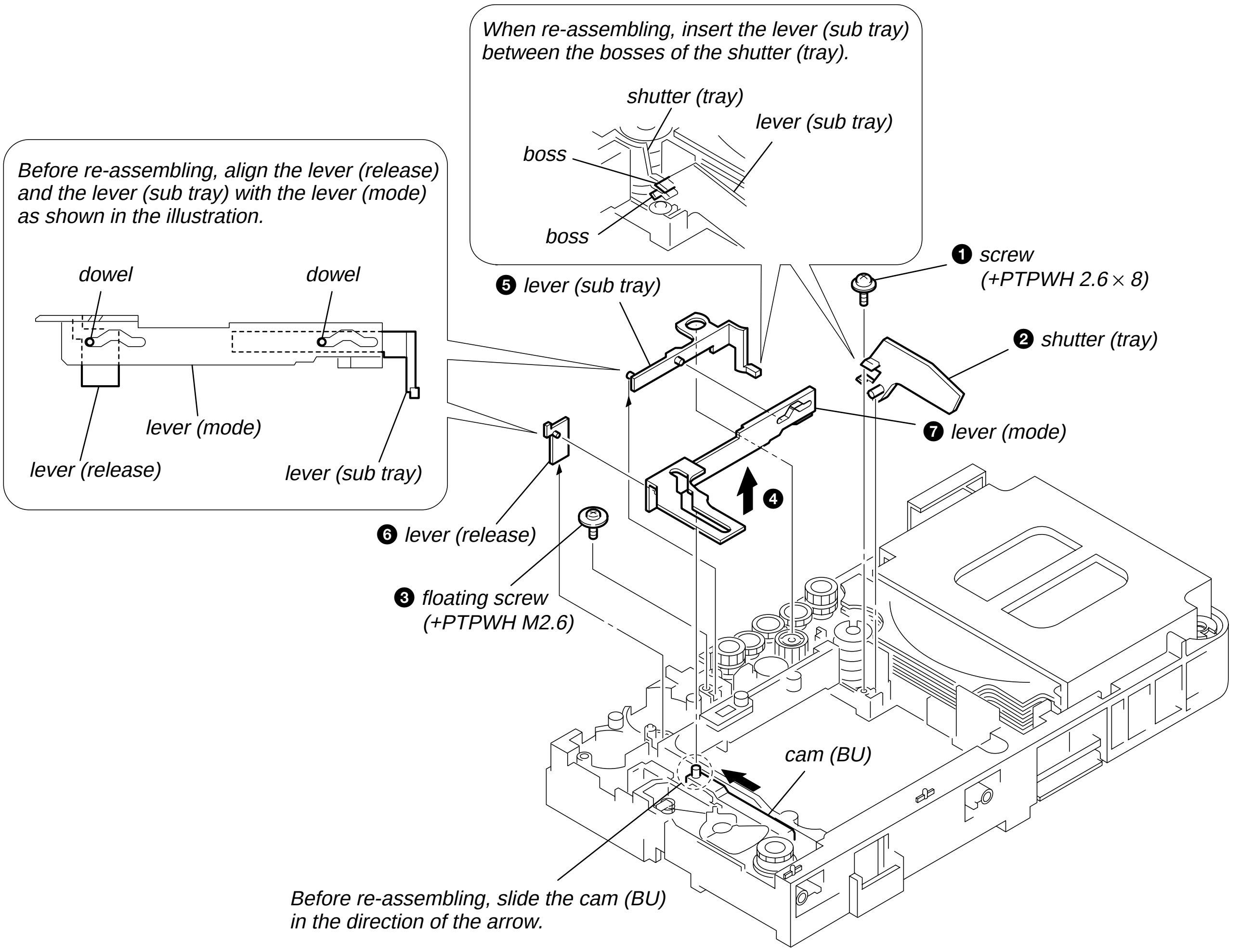
PRECAUTION DURING GEAR (SUB TRAY 1/2) INSTALLATION

Align the marks of the gears as shown in the illustration.


gear (sub tray 2)
gear (sub tray 1)
gear (sub tray 2)


❶ three screws (+PTPWH 2.6 × 8)
❹ three gears (sub tray 1)
❷ gear (sub tray 2)
❸ gear (sub tray 2)

1-3. LEVER ASSY



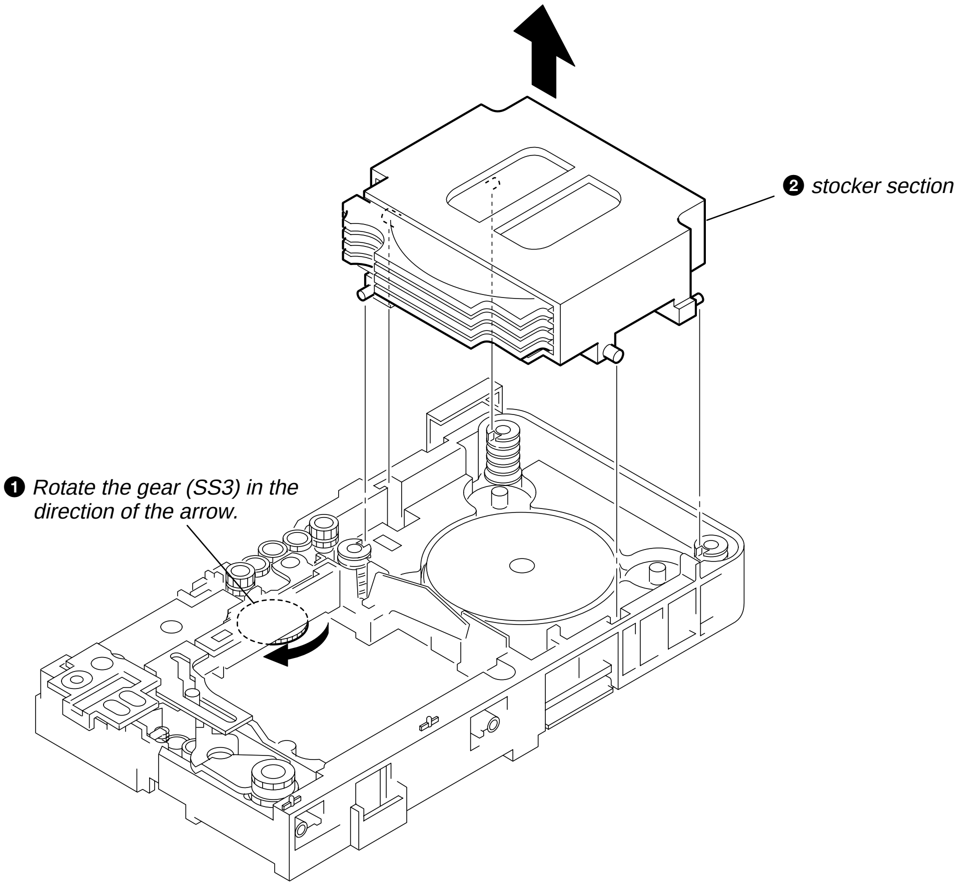
When re-assembling, insert the lever (sub tray) between the bosses of the shutter (tray).

Before re-assembling, align the lever (release) and the lever (sub tray) with the lever (mode) as shown in the illustration.

Before re-assembling, slide the cam (BU) in the direction of the arrow.

shutter (tray)
lever (sub tray)
boss
boss
dowel
dowel
lever (mode)
lever (release)
lever (sub tray)
❶ screw (+PTPWH 2.6 × 8)
❷ shutter (tray)
❸ floating screw (+PTPWH M2.6)
❹
❺ lever (sub tray)
❻ lever (release)
❼ lever (mode)
cam (BU)

1-4. STOCKER SECTION



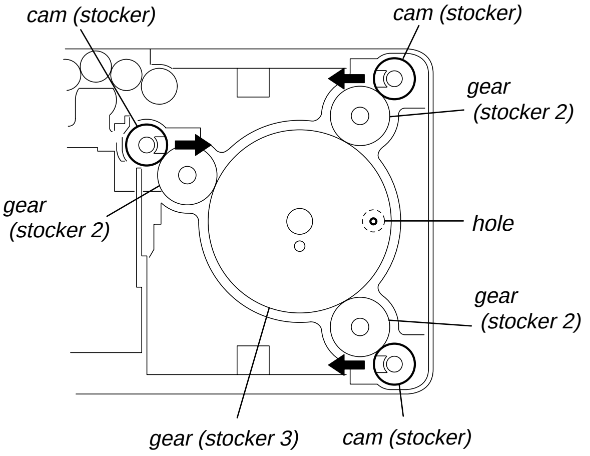
❷ stocker section

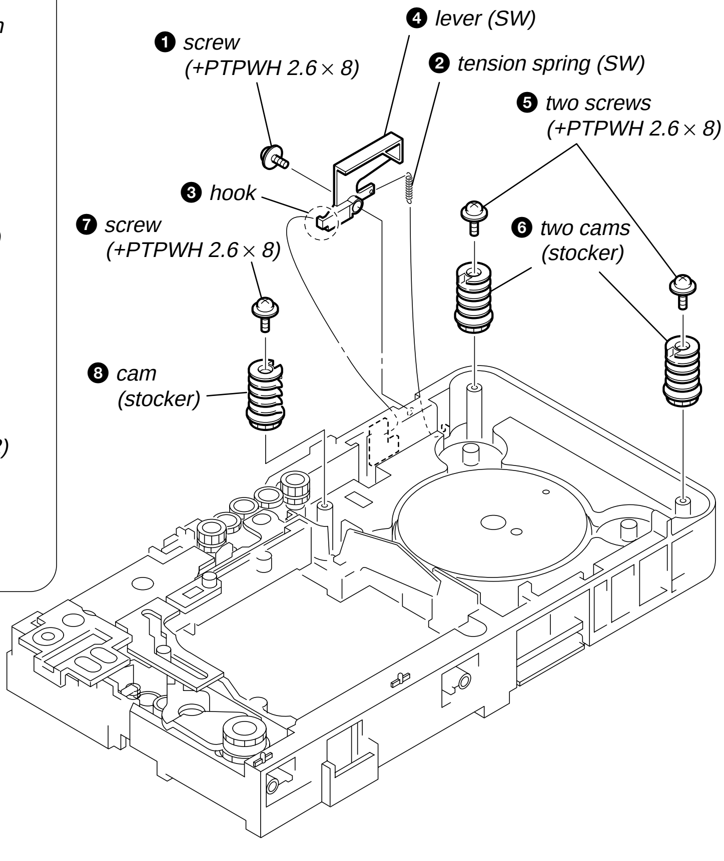
❶ Rotate the gear (SS3) in the direction of the arrow.

1-5. CAM (STOCKER)

PRECAUTION DURING CAM (STOCKER) INSTALLATION

Before installing the cams (stocker), fix the gear (stocker 3) in the manner so that the hole of the gear (stocker 3) should be aligned with the hole of the chassis located beneath the gear (stocker 3). Be sure to install the cams (stocker) in such a way that the grooves of the cams (stocker) face the direction of the arrows.


cam (stocker)
cam (stocker)
gear (stocker 2)
gear (stocker 2)
hole
gear (stocker 2)
gear (stocker 3)
cam (stocker)



❶ screw (+PTPWH 2.6 × 8)

❷ tension spring (SW)

❸ hook

❹ lever (SW)

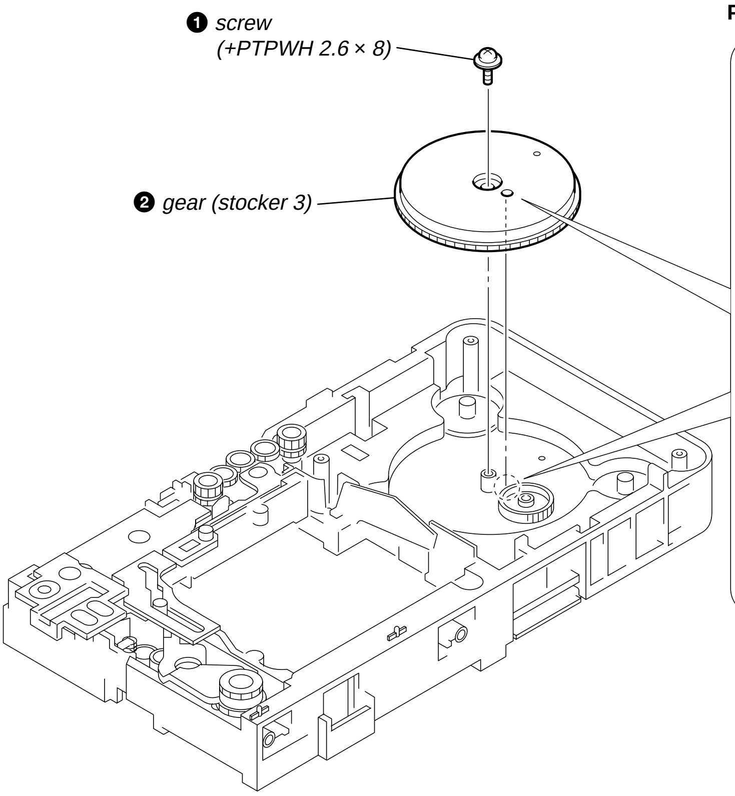
❺ two screws (+PTPWH 2.6 × 8)

❻ two cams (stocker)

❼ screw (+PTPWH 2.6 × 8)

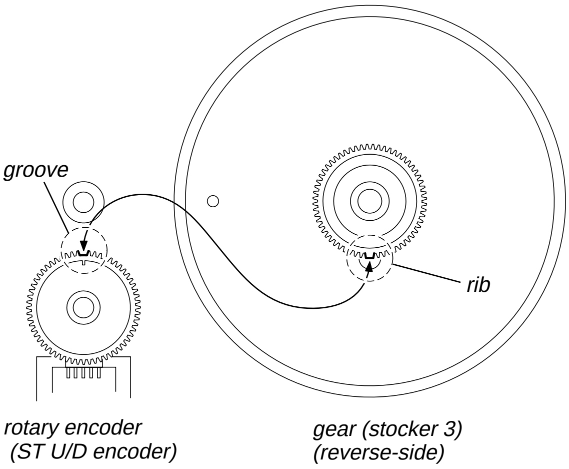
❽ cam (stocker)

1-6. GEAR (STOCKER 3)


① screw
(+PTPWH 2.6 × 8)
② gear (stocker 3)

PRECAUTION DURING GEAR (STOCKER 3) INSTALLATION

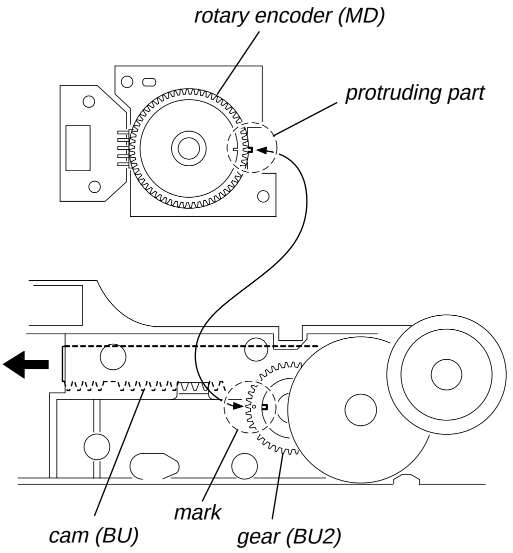
Be sure to align the rib of the gear (stocker 3) with the groove of the rotary encoder.

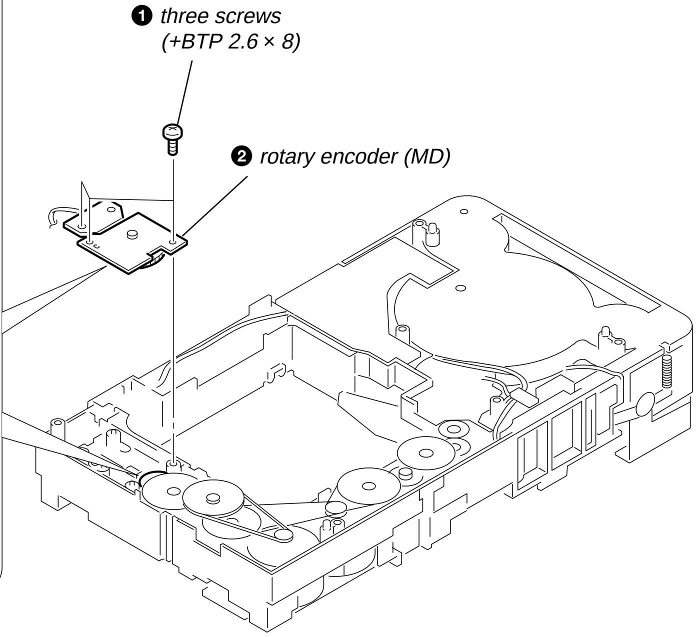

groove
rib
rotary encoder
(ST U/D encoder)
gear (stocker 3)
(reverse-side)

1-7. ROTARY ENCODER (MD)

PRECAUTION DURING ROTARY ENCODER (MD) INSTALLATION

Slide the cam (BU) in the direction of the arrow so that the mark of the gear (BU2) can be seen. Engage the gears while aligning the mark of the gear (BU2) with the protruding part of the rotary encoder.

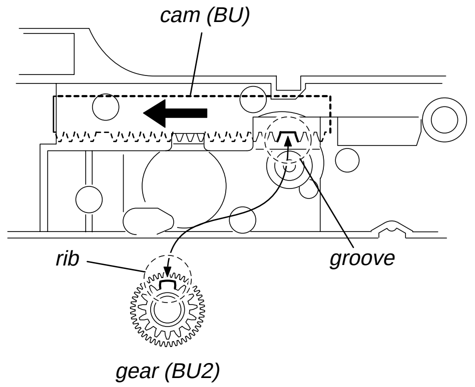

rotary encoder (MD)
protruding part
cam (BU)
mark
gear (BU2)

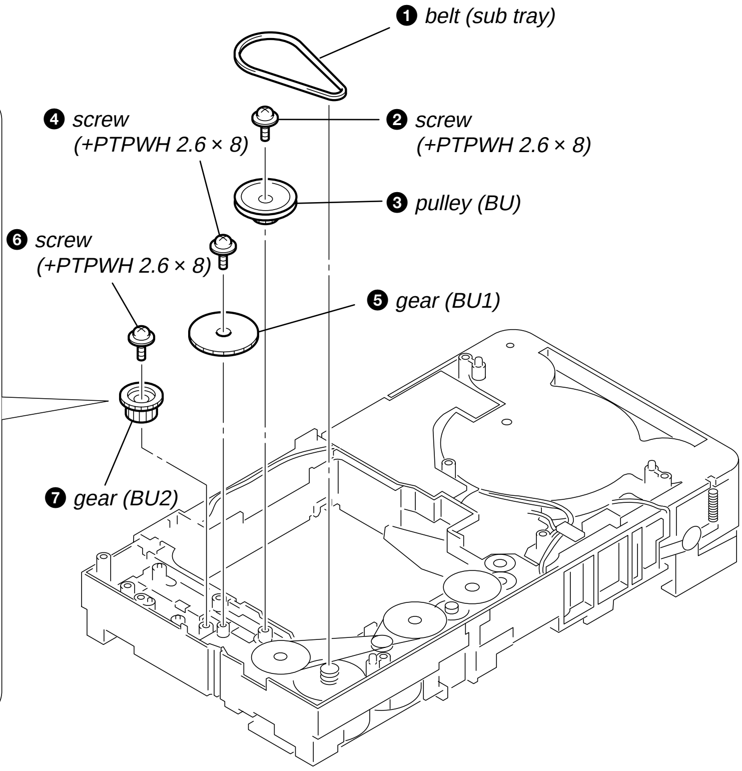

① three screws
(+BTP 2.6 × 8)
② rotary encoder (MD)

1-8. GEAR (BU2)

PRECAUTION DURING GEAR (BU2) INSTALLATION

Before re-assembling, slide the cam (BU) in the direction of the arrow.
Assemble the gear (BU2) in such a manner that the groove of the cam (BU) is aligned with the rib of the gear (BU2).


cam (BU)
rib
groove
gear (BU2)


❶ belt (sub tray)
❹ screw (+PTPWH 2.6 × 8)
❷ screw (+PTPWH 2.6 × 8)
❸ pulley (BU)
❻ screw (+PTPWH 2.6 × 8)
❺ gear (BU1)
❼ gear (BU2)

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the top of the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.06	New
1.1	2004.06	Addition of TEST MODE and ELECTRICAL ADJUSTMENT with SUPPLEMENT-1 (9-877-956-81)
1.2	2004.07	Addition of New type models with SUPPLEMENT-2 (9-877-956-82)
1.3	2004.08	• Addition of MODEL IDENTIFICATION • Correction of DIAGRAMS • Addition of SERVICING NOTE, DISASSEMBLY and BLOCK DIAGRAM with SUPPLEMENT-3 (9-877-956-83)
1.4	2004.09	Addition of CDM81 DISASSEMBLY with SUPPLEMENT-4 (9-877-956-84) (SPM-04092)
1.5	2004.11	Correction of screws Addition of Part No. for new type model's OP (SPM-04116) Correction of ELECTRICAL ADJUSTMENT for new type (SPM-04123)
1.6	2007.10	Correction of parts number for Ref. No. 211 and 213 (SPM-07096)

SS-CT11/TS10/
TS11/WS10

SERVICE MANUAL

Ver 1.0 2004.06

US Model
Canadian Model
SS-CT11/TS10/TS11/WS10
E Model
Australian Model
SS-CT11/TS11

- SS-TS10/WS10 are the speaker section in DAV-BC150/250.
- SS-CT11/TS11 are the speaker section in DAV-BC250.

SS-CT11
SS-TS10
SS-TS11
SS-WS10

SPECIFICATIONS

Speakers (DAV-BC150)
Front/Center/Surround

Speaker system	Bass reflex
Speaker unit	70 mm (2 7/8 inches) dia. cone type
Rated impedance	4 ohms
Dimensions (approx.)	100 × 105 × 110 mm (3 7/8 × 4 × 4 1/4 inches) (w/h/d)
Mass (approx.)	0.6 kg (1 lb 6 oz)

Speakers (DAV-BC250)
Front

Speaker system	Bass reflex
Speaker unit	70 mm (2 7/8 inches) dia. cone type
Rated impedance	4 ohms
Dimensions (approx.)	260 × 1110 × 260 mm (10 1/4 × 43 5/8 × 3 1/8 inches) (w/h/d)
Mass (approx.)	3.5 kg (7 lb 12 oz)

Center

Speaker system	Bass reflex
Speaker unit	70 mm (2 7/8 inches) dia. cone type
Rated impedance	4 ohms
Dimensions (approx.)	295 × 100 × 80 mm (11 1/2 × 3 7/8 × 3 1/8 inches) (w/h/d)
Mass (approx.)	0.8 kg (1 lb 13 oz)

Surround

Speaker system	Bass reflex
Speaker unit	70 mm (2 7/8 inches) dia. cone type
Rated impedance	4 ohms
Dimensions (approx.)	100 × 105 × 110 mm (3 7/8 × 4 × 4 1/4 inches) (w/h/d)
Mass (approx.)	0.6 kg (1 lb 6 oz)

Subwoofer (DAV-BC150/BC250)

Speaker system	Bass reflex
Speaker unit	160 mm (6 3/8 inches) dia. cone type
Rated impedance	4 ohms
Dimensions (approx.)	175 × 380 × 405 mm (7 × 15 × 15 7/8 inches) (w/h/d)
Mass (approx.)	6.7 kg (14 lb 13 oz)

Design and specifications are subject to change without notice.

SUBWOOFER/SPEAKER SYSTEM

9-877-957-01
2004F16-1
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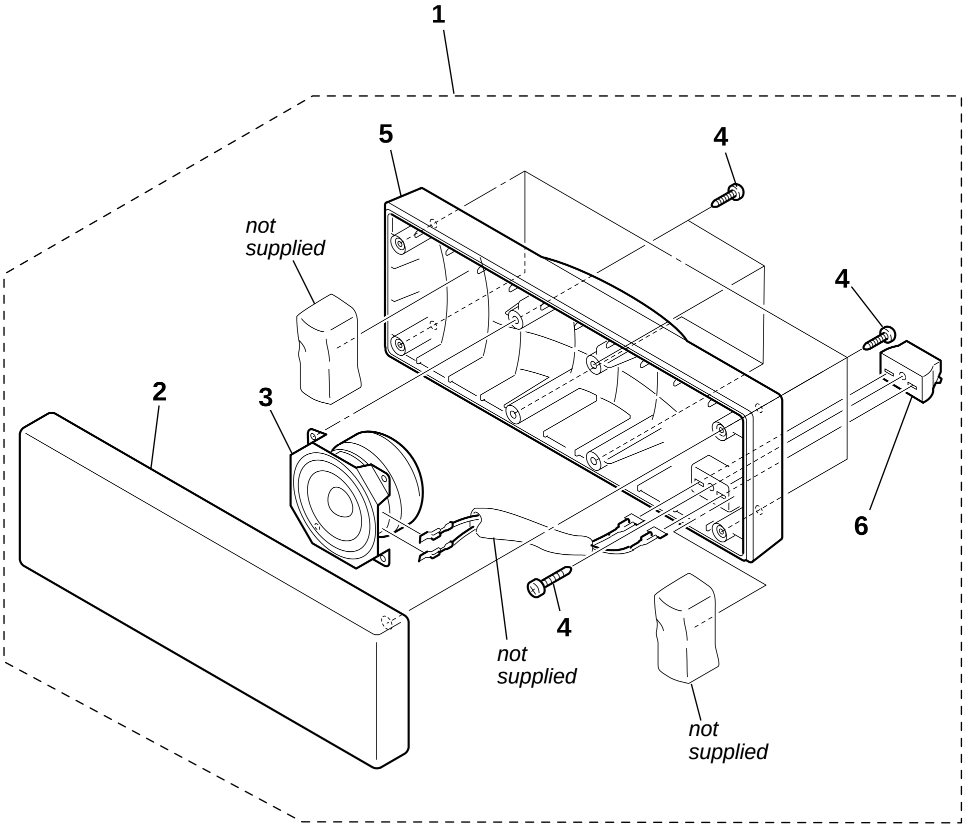
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

SS-CT11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4
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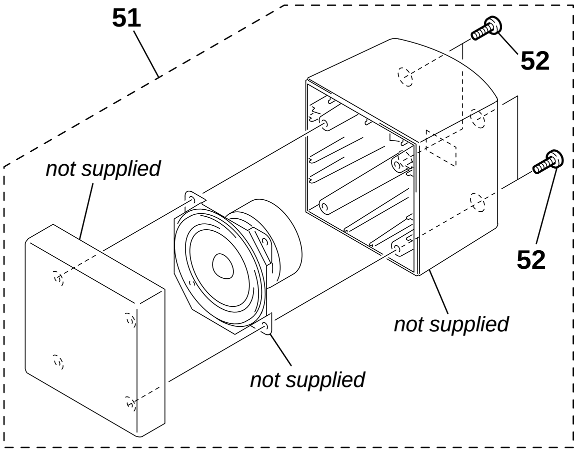
Ref. No.	Part No.	Description	Remark
1	A-4715-529-A	OVERALL ASSY	
2	4-254-936-01	FRAME, GRILLE	
3	1-825-872-11	SPEAKER (7CM)	
4	4-874-614-02	SCREW (1) (3.5X14), TAPPING	
5	4-254-937-01	CABINET	
6	1-694-836-11	TERMINAL, SPEAKER	

SS-TS10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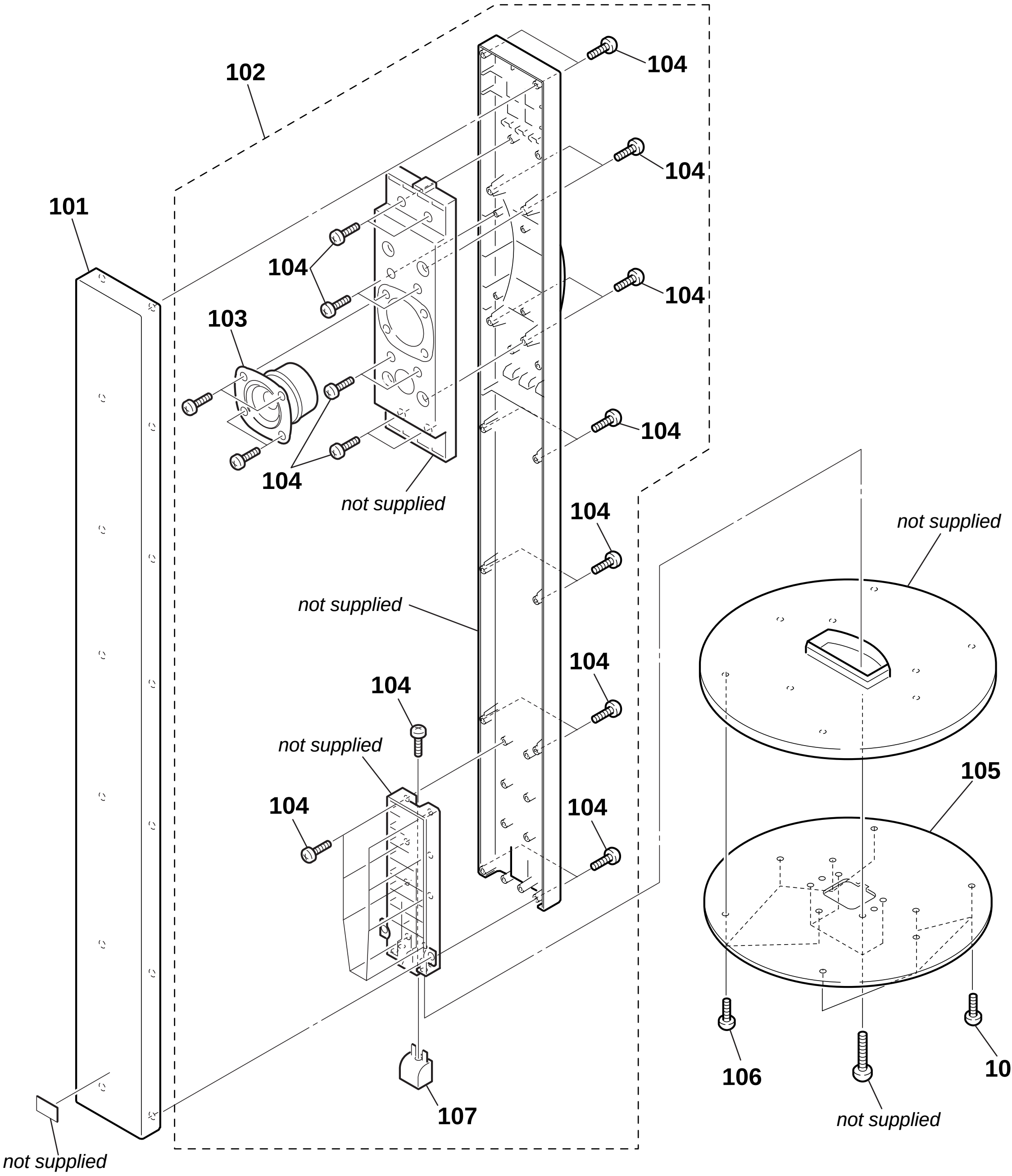
Ref. No.	Part No.	Description	Remark
51	A-4715-281-A	OVERALL ASSY	
52	4-874-614-02	SCREW (1) (3.5X14), TAPPING	

SS-TS11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not supplied
not supplied
not supplied
not supplied
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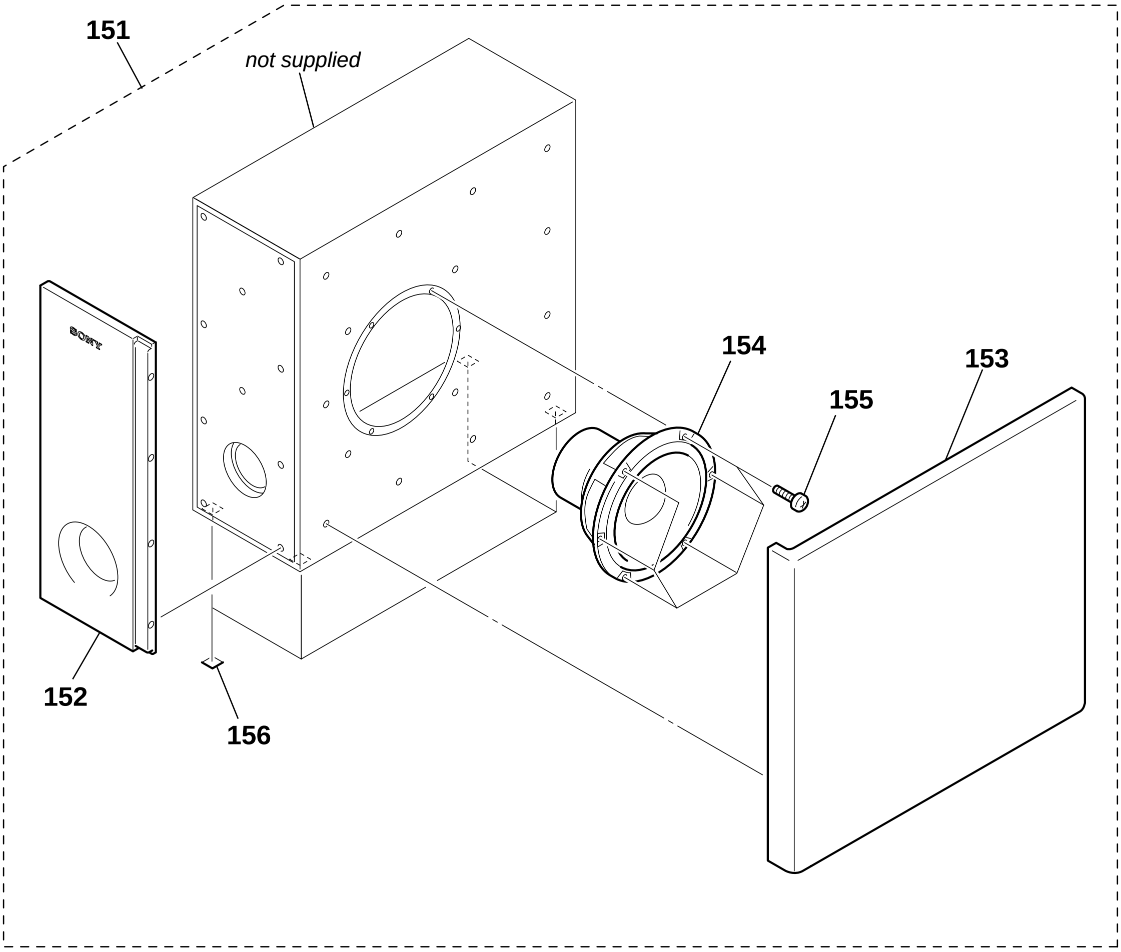
not supplied

Ref. No.	Part No.	Description	Remark
101	4-254-930-01	FRAME, GRILLE	
102	A-4715-528-A	CABINET ASSY	
103	1-825-871-11	SPEAKER (7CM)	
104	4-874-614-02	SCREW (1) (3.5X14), TAPPING	

Ref. No.	Part No.	Description	Remark
105	X-2022-095-1	BASE SUB ASSY	
106	4-986-971-12	SCREW (3.5)	
107	1-694-836-11	TERMINAL, SPEAKER	

SS-WS10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SONY

Ref. No.	Part No.	Description	Remark
151	A-4715-285-A	OVERALL ASSY	
152	4-254-890-01	PANEL, FRONT	
153	4-254-889-01	FRAME, GRILLE	
154	1-825-868-11	SPEAKER (16CM)	
155	4-874-614-52	SCREW (1) (3.5X20), TAPPING	
156	4-249-156-01	FOOT (FRONT)	

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.06	New